

Utilization Of Central Government Health Scheme In India By Postal Employees And Their Family Members Impact On General And Dental Health

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ABSTRACT

Aim: This study assess the knowledge of utilization of CGHS on general and dental health among postal employees and their family member

Methodology: This cross-sectional study examined the utilization of the Central Government Health Scheme (CGHS) among postal department employees, pensioners, and dependents. Using Google Forms-based questionnaire, the research analyzed general and dental health issues and assessed awareness of CGHS eligibility criteria.

Results: Most participants are females aged 41-50, with educational attainment ranging from under graduation to post graduation. Financially, many fall in the income range of 27,654-46,089. Awareness of CGHS is high, with 67.33% familiar with the scheme and 55.38% holding CGHS cards. About 62.95% are aware of dental treatment coverage. Most consider themselves in good health, with 42.23% reporting no systemic diseases and 54.18% having no adverse habits. The study reveals a predominantly female population with 55.37% of postal employees utilizing the CGHS due to residential area coverage. The majority opt for semi-government hospitals. Awareness about CGHS dental and medical coverage is high, with 68.8% regularly availing dispensary services.

Conclusion: CGHS faces limitations like unavailability of services of people residing outside the coverage area. These shortcomings can be addressed by expanding this scheme's coverage area and manpower.

Keywords: Central Government Health Scheme, General Health, Dental Health, Awareness

INTRODUCTION:

Oral health directly refers to the health of our mouth. Many of the oral health conditions are preventable and curable at a very initial stage. There are many oral health conditions that affect a wide range of populations, including dental decay, periodontal disease, tooth loss, and oral cancer [1]. The generalized awareness about the oral health among the mass population can be intervened by the process of addressing the risk factors among the public which includes encouraging the reduction of adverse habits such as smoking, alcohol consumption, and drug use, which are prevalent contributors to deteriorating oral health; Promoting proper and balanced dietary habits, ensuring an adequate intake of vitamins and minerals; Advocating for a decrease in the consumption of processed sugars and sweeteners, which can elevate microbial activity in the oral cavity; Emphasizing early detection of detrimental oral habits such as thumb sucking, mouth breathing, and nail biting

in pediatric populations; Educating the public about the importance of proper brushing techniques and oral hygiene practices, and providing effective oral hygiene instructions.

General health deals with the overall basics of the body which includes the anatomical and physiological conditions which acts as the primary base for the wellness of the general health. Overall good general health is not merely absence of disease or infirmity it also comprises of complete physical, mental and social well-being [2]. General health should be properly maintained by practicing health practices like balanced dietary routine, proper sleep cycle, managing mental health issues, preventive health checkups and a wholesome lifestyle [3]. The health of a population plays an influential role in the development of the country. [4] For example, in the growing young population there is alarming increase in issues related to general health wellness due to improper diet routine, stagnant lifestyle, and adverse habits increases the risk factor of obesity and other problems. Obesity is one of the commonest health related issues caused due to the improper balance in lifestyle and dietary habits [5]. As a window into the body's general health, the dental health plays an integral role [6]. Oral cavity if the first line indication for the long-term persisting systemic disease of general health. In any systemic conditions the human body proportionately affects the oral health such as diabetes mellitus, hypothyroidism, cardiovascular disease and many more the prevalent systemic disease in India is majorly diabetes mellitus. The major oral manifestations of uncontrolled diabetes are xerostomia, delayed wound healing, gingivitis, periodontitis. Diabetic oral manifestations are early indicators of diabetes [7].

Numerous recommendations and initiatives for oral and general health wellness have been laid down by the Indian government. Prescription drugs and outpatient, inpatient, and tertiary care are provided by four health schemes for government employees, pensioners, and their families. [8]. These schemes cover nearly about 6.8% of India's total population. One of the effective and functional schemes implemented by the government of India which is also widely accessed by the central government employees is CGHS which provides an all-round general health and dental health checkups along with the required medications and laboratory investigations [8].

CGHS offers medical services to eligible employees and retirees of the Indian Central Government, granting them access to reimbursement and cashless medical benefits upon enrollment [8]. The CGHS stands out due to its extensive reach, catering to a large number of beneficiaries. Moreover, its primary objective is to deliver healthcare services with an open-ended and generous approach. The CGHS is dedicated to expanding its coverage to additional cities, thereby enhancing accessibility to its services [8]. It's worth highlighting that the CGHS encompasses healthcare across various systems of medicine, including Allopathy, Homeopathy, Ayurveda, and Unani [9]

The CGHS is allocated for the civilian employees, pensioners and dependents (under spouse and children criteria). This CGHS is available in 71 cities across India. This programme includes over three million participants who gain benefits at the same time. CGHS is committed to meeting the healthcare requirements of beneficiaries spanning across the Legislature, Judiciary, Executive, and Press sectors. Beneficiaries of CGHS have the flexibility to receive treatment at any accredited private hospital of their preference. Notably, CGHS beneficiaries are not obligated to furnish a referral letter for availing of healthcare services. [9] Though CGHS provides better dental and medical services in a cost-efficient way, it was not well established all over India as there is lesser knowledge among postal employee on this scheme. Thus, the study was implemented to assess the awareness and utilization of CGHS among postal employees and their family on general and dental health impact in India.

METHODOLOGY:

The research is conducted as a cross-sectional study, which entails a comprehensive analysis of data collected from a diverse sample population at a singular moment in time, conducted from November 2023 to January 2024 based on CGHS among the postal department employees, pensioners and dependents. Utilizing a Google Form-based questionnaire as the principal data collection tool, this survey sought to analyze the utilization patterns of the Central Government Health Scheme (CGHS) among eligible postal employees and their respective family members. The main aim of the study was to examine how well the programme affected the general and dental health outcomes of this population. Using a variety of strategies, the questionnaire design was carefully developed, incorporating knowledge gained from an extensive analysis of relevant literature, which included previously published works, reputable websites, official government documents from the national government, and standardized General Health Performa from oral health surveys carried out by the World Health Organisation (WHO).[10]

In order to investigate general and dental health issues, this study included targeted questions to evaluate respondents' primary health status as well as demographic questions to segment health concerns. The goal of the study was to obtain a thorough understanding of health issues and general well-being. Furthermore, the survey comprised questions designed to assess postal department staff member's knowledge of CGHS and their comprehension of its features and advantages which were derived from guidelines outlined in the handbook released by the central government of India.[11] The questionnaire was pretested and validated. The aim is to assess respondent's familiarity on CGHS eligibility criteria, including considerations such as income thresholds and residential status, among postal department employees. Additionally, the survey prompted self-awareness

regarding general and dental health, promoting individual responsibility and self-determination in participants.

To ensure broad accessibility and ease of participation, the Google Forms were disseminated to postal employees and their family members through multiple channels, including text messages and emails. This multifaceted approach enabled individuals to conveniently access the questionnaire from a variety of devices, such as smartphones, laptops, and personal computers, thereby eliminating barriers to participation based on technological constraints. By leveraging ubiquitous communication mediums like text messages and emails, the survey organizers maximized the likelihood of engagement from a diverse range of respondents, regardless of their preferred means of digital communication. This inclusive distribution strategy facilitated widespread participation and enhanced the representativeness of the collected data.

The utilization of digital platforms for data collection streamlined the questionnaire completion process, providing respondents with flexibility and convenience. This approach enhanced participation rates and ensured a comprehensive dataset for analysis. The responses collected through Google Forms was analyzed, compiled and tabulated for demographic, general and dental health data.

RESULTS:

The response towards this study has a positive outcome and the employees of postal department are well aware about the central government health scheme and its benefits and there is a wide range of utilization of this scheme among the employees and their family. This scheme is compulsory for all the central government employees if their residential address is covered under the CGHS allocated areas. Participants in this study total up to 251 which constitutes about 131(52.2%) are female and 120(47.8%) are males. The majority of the participants are females in this selected population for this study. Graphical representation of the database is given in figure 1

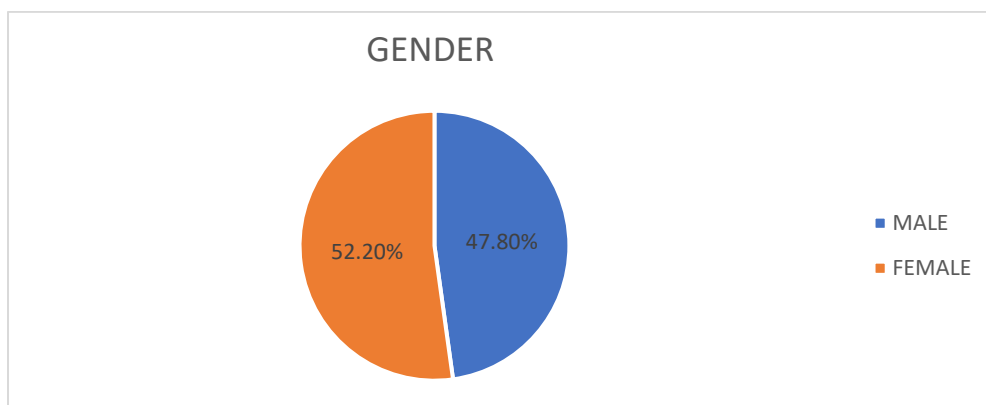


Figure 1: Distribution of study Participants based on Gender

Varied number of age group population is included in this study ranging from 20 - 30 years which includes about 23 (9.16%) persons. In 31-40 years, the total numbers of participants are 30(11.5%). In 41-50 years, the total numbers of participants are 122(48.60 %). In 51-60 years, the total numbers of participants are 66(26.29%). in the age group ranging above 60 years the total number of participants are 10(4.45%). The majority of the participants are aged between 41-50 years. The graphical representation of this database is given in figure 2.

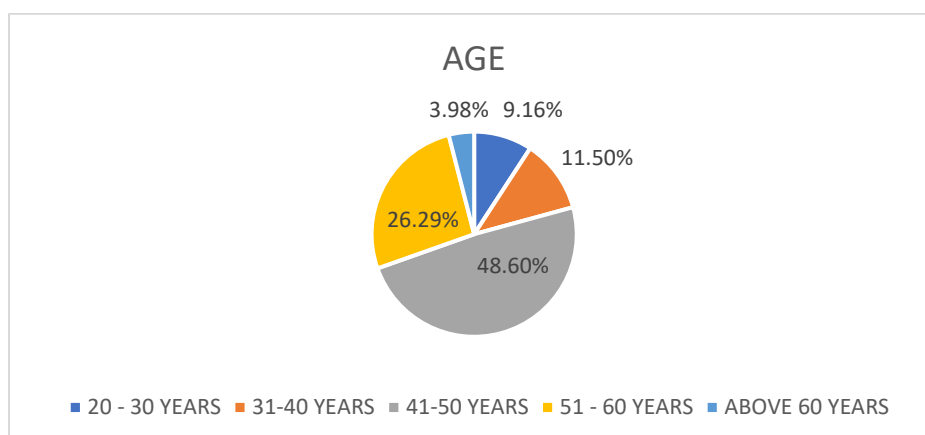


Figure 2: The graphical data illustrates the distribution of study participants based on age groups

The educational status of the candidates participating in the study is incorporated within the research. This study includes people who have completed only till primary education to post graduates. The total number of postal employees and their family members who have completed only till 10th standard are 11(4.4%) who have completed till 12th standard are 51(20.3%), who completed till under graduation are 93(37.1%), who completed till post graduates are 96(38.2%). The graphical representation of the database is given in figure 3

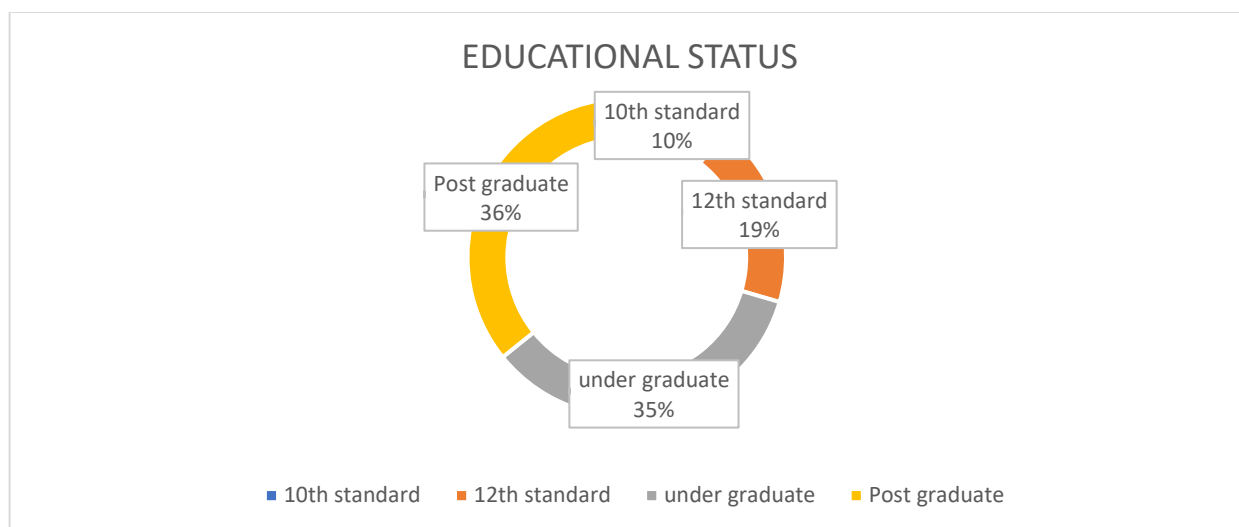


Figure 3: The graphical representation showcases the educational status of the study participants

TABLE 1: Distribution of Data among Postal Employees According to Income Group

QUESTIONS REPRESENTING THE INCOME	NUMBER OF POSTAL EMPLOYEES N (%)
Average family income	67 (26.70%)
More than 1,04,37	18 (7.17%)
92,191 – 1,04,376	49 (19.52%)
68,967-92,185	15 (5.98%)
46,095-68,967	81 (32.27%)
27,654-46,089	20 (7.96%)
9,232-27,648	1 (0.40%)
Less than 9,232	

Table1 shows overall data based on income collected from the postal employees and their families the majority of the candidate's financial income falls under the range of 27,654-46,089 the total number of candidates are 81 which nearly constitutes about 32.27% of the total.

TABLE2: DISTRIBUTION OF DATA BASED ON THE AWARENESS OF CGHS AMONG POSTAL EMPLOYEES

QUESTIONS ON CGHS	NUMBER OF POSTAL EMPLOYEES N (%)
Are you aware about the facilities provided by the central government health scheme	
Yes	169 (67.33%)
No	82 (32.67%)
Are you a CGHS card holder?	
Yes	139 (55.38%)
No	112 (44.62%)
By which means do you avail the CGHS facilities?	
Current central government employee	92 (36.66%)
By dependency criteria [spouse, children]	65 (25.90%)
Pensioners	52 (20.71%)
Others	42 (16.73%)
Are you aware that CGHS covers dental treatment also?	
Yes	158 (62.95%)
No	93 (37.05%)

Table 2 shows the data representing the awareness of postal workers and their families on CGHS. Majority of the candidates are well aware of the scheme about 139 postal employees are CGHS card holders they also avail the CGHS facilities by current central government employee criteria. About 62.94% of the candidates are well aware about the dental coverage of the CGHS scheme.

TABLE 3: GENERAL HEALTH BASED DATA COLLECTED AMONG POSTAL EMPLOYEES AND THEIR FAMILY MEMBERS

GENERAL HEALTH BASED QUESTIONS	NUMBER OF POSTAL EMPLOYEES N (%)
How healthy do you consider yourself?	
Excellent	53 (21.11%)
Very good	54 (21.51%)
Good	87 (34.66%)
Fair	36 (14.35%)
Poor	21 (8.37%)
Are you suffering from any systemic disease?	
Diabetes	33 (13.15%)
High/low blood pressure	35 (13.94%)
Hypothyroidism	52 (20.72%)
Parkinson's disease	25 (9.96%)
Nil	106 (42.23%)
How often do you get yourself a Dental And General Health Checkup?	27 (10.76%)
3 Months Once	
6 Months Once	49 (19.52%)
9 Months Once	49 (19.52%)
One Year Once	70 (27.89%)
None	56 (22.31%)
Which type of Hospital / Institution do you prefer to get your Body Checked?	
Government Hospitals	57 (22.71%)
Semi Government Hospitals	115 (45.82%)
Private Hospitals	79 (31.47%)
Are You Habituated Actively or Passively to any Adverse Habits	
Drugs	20 (7.98%)
Smoking	34 (13.56%)
Alcoholism	37 (14.74%)
Pan Chewing	24 (9.56%)
No Adverse Habits	136 (54.18%)

Table 3 shows medical health-based data among postal employees and their family members. Majority of the candidates consider their health status as good and they get their general and dental health checkup done once in a year. According to this study, the majority of individuals undergo medical examinations at semi-government hospitals.

Table 4: Dental health-based data collected among the postal employees and their family members

QUESTIONS BASED ON DENTAL HEALTH	NUMBER OF POSTAL EMPLOYEES N (%)
What are the steps you follow to keep your teeth clean and hygienic?	
Brushing twice with floss	
Brushing once with floss	36 (14.34%)
Brushing twice only	48 (19.11%)
Brushing once only	86 (34.26%)
None of the above	71 (28.29%)
	10 (4.0%)
How many natural teeth do you have?	
1-9 natural teeth	26 (10.35%)
10-19 natural teeth	82 (32.67%)
20 and more	134 (53.39%)
None	9 (3.59%)
Do you have any removable denture?	
Yes	102 (40.64%)
No	149 (59.36%)
Do you have any difficulties in consuming food, talking, or any aesthetic issues?	
Yes	73 (29.08%)
No	178 (70.92%)

Table 4 shows data representing dental health of the postal employees and their family members. Majority of the candidates only brushes twice daily without any dental aids such as floss. This table enumerates the dental treatment among the selected group of population.

DISCUSSION:

Analysis revealed that the majority of the populations in this study are female than males. Only about half (55.37%) of the postal employees avail this scheme due to the coverage of residential area. D. Halder and colleagues found that a significant hindrance to accessing services, as reported by 55% of participants, was the distance from their place of residence, a finding consistent with the results of the conducted research [9]

The study also reveals that the majority of the people avail this scheme via semi government hospital. Rakesh Sharwal et al states that a significant portion, comprising 59% (830,000 individuals), of serving civilian employees hails from the central police forces, affording them the option to access medical services either through CGHS or their respective unit hospitals. It facilitates referrals to preferred private facilities and provides access to an extensive array of prescription medications [9]. According to the present study, about 62.95% of the study participants were well aware about the dental and medical coverage of the CGHS scheme. Similarly, in Halder D et al more than 2/3rd (68.8%) participants mentioned that they availed all services includes general and dental health services from the CGHS regularly.[9]

This study also reveals that minority of the candidates of the study suffer from various systemic disease like diabetes, high/low blood pressure hypothyroidism and Parkinson disease. In contrary, Manoj Grover et al reported that the majority of the elderly suffer from multiple disorders. Many beneficiaries have reported being provided with excess medications, a significant portion of which remains unconsumed due to poor tolerance, partial relief, or possibly due to inadequate counseling from healthcare providers regarding the importance of treatment compliance, particularly with antibiotics, anti-hypertensives, oral hypoglycemic, and similar medications. The CGHS wellness clinic operates primarily as a conduit for referrals to private hospitals and for processing reimbursement claims [12].

The conducted study unveiled that the majority of the beneficiaries are presently serving central government employees. In other states studied, active employees are presently required to cover the expenses of their treatment at the hospital, which are subsequently reimbursed by the government [12]. Most of the family members of the current central government employees are availing this CGHS scheme for their medical needs. The CGHS was envisioned to offer comprehensive medical care to both serving and retired Central Government employees and their families, aiming to replace the cumbersome and costly system of reimbursement [8].

More than 2/3rd of the candidates are well aware about the central government health scheme and are availing the scheme. On the contrary, despite the heightened emphasis on satisfaction as a metric for outcomes and an expanding body of research, defining satisfaction has proven to be challenging [13]. Majority of the candidate avail CGHS facilities in semi government hospitals. The provision of institution-based, quantifiable, and verifiable services for secondary and tertiary care procedures is well-suited to contracting and verification processes [14]. The majority of insurance models typically do not encompass outpatient care, which, alongside medication expenses, stands as a primary contributor to out-of-pocket spending. Nevertheless, these aspects are essential for delivering comprehensive and cost-effective healthcare [8].

But CGHS provide a wide range of outpatient care and prescribed medicines as per the patient's needs. This CGHS scheme only covers about 25 cities in all over India which makes it difficult for many central government employees to avail it. In an ideal scenario and for the long run, it is preferable to expand CGHS dispensaries to all cities with a significant population of employees and pensioners. The CGHS benefit package is exceedingly comprehensive, devoid of any exclusion, co-payments, deductibles, or annual coverage limits [9]. There are many disadvantages which makes the CGHS scheme inefficient. The deficiencies pinpointed included the lack of CGHS hospitals offering inpatient services, issues with medication supply, and prolonged wait times. An evaluation was conducted, taking into account the cost, suitability, and standard of services provided by CGHS alongside other healthcare systems in Kolkata. CGHS was ranked higher than other health systems by 59.0% respondents (govt. and pvt.) [9].

Banerjee B et al states that a number of suggestions for improving CGHS were noted by respondents and found that It was suggested that the drug supply system be improved by 78.7% of respondents. Additionally, 67.2% suggested expanding service hours i.e. 24 hours service [15]. Elshabrawy *et al.* also found Dissatisfaction with long wait times [16]. In addition, more than two thirds of participants (68.8%) indicated that they regularly used dispensaries i.e. for all health problems (except in cases of emergency) at all times [15]. Sindhu R et al reported that cumulative empirical evidence has highlighted that long-established objective metrics of socio-economic status, such as income, educational level, and occupation, shows high correlations with personal well-being indicators.[17] Thus, the present study includes the socio-economic status such as educational status and income-based data which reveals, nearly 32.27% of the participants falls under the income group in the range of 27,654 – 46,089. While in educational status about 36% of the participants completed post graduate degree. About majority (34.26%) of the postal employees brushes twice daily without any dental aids such as floss. An earlier study conducted on university employees revealed that 68% of the subjects brushed their teeth more than once daily, which was much higher than the present study [18]. Even though CGHS has their own disadvantages it is considered as the one of the useful and efficient government scheme on the basis of outpatient treatment and pharmaceutical dispensaries and are widely used by the central government employees [19]. Thus, the benefits of the CGHS scheme not only confines with the central government employees and ex-employees its facilities are also benefited by their family members was well endorsed by the current study.

CONCLUSION

The central government health scheme is widely utilized among the postal employees and their family members as it provides a wide range of medical and dental health coverage facilities. This scheme has immensely impacted the beneficiary's general health and dental health in a positive aspect by providing at most outpatient

care and cost-free medications prescribed by the practitioner. CGHS also faces limitations like unavailability of services of people residing outside the coverage area. These shortcomings can be addressed by expanding this scheme's coverage area and manpower.

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