

AWARENESS, UTILIZATION, AND SATISFACTION OF SEHAT CARD PLUS AT A TERTIARY CARE HOSPITAL IN KHYBER PAKHTUNKHWA: A CROSS-SECTIONAL STUDY

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Abstract: Over 930 million individuals worldwide face significant financial barriers when seeking essential healthcare services, with more than 100 million people annually being pushed into extreme poverty due to healthcare expenses. The main objective of this study is to find the awareness, utilization, and satisfaction of Sehat Card Plus at a tertiary care hospital in Khyber Pakhtunkhwa. This cross-sectional study was conducted at a private tertiary care hospital in Peshawar, Khyber Pakhtunkhwa, from August 2022 to January 2023. The study included 463 patients visiting the tertiary care hospital. A structured questionnaire was developed to gather data on participants' awareness of the Sehat Card Plus program, their utilization of the card for healthcare services, and their satisfaction with its benefits and coverage. Data was collected from 463 patients. The mean age was 42±11.5 years, with 45% female and 55% male participants. Socioeconomic status analysis revealed that 67% of participants belonged to low-income households, while 17% were classified as middle-income and 16% as high-income. 82% of respondents were aware of the Sehat Card Plus program, with television/radio being the most common source of awareness (33%), followed by word of mouth (29%) and social media (27%). However, only 73% knew who was eligible for the program, and 53% knew the services covered. It is concluded that awareness of the Sehat Card Plus program is notable, but substantial gaps exist in understanding eligibility criteria and covered services among participants. Satisfaction with services under this program is moderately high, and the population has a significant demand for the government to introduce similar schemes.

Keywords: Sehat Card Plus, Healthcare Access, Utilization, Satisfaction, Awareness, Socioeconomic Status

Introduction

Over 930 million individuals worldwide face significant financial barriers when seeking essential healthcare services, with more than 100 million people annually being pushed into extreme poverty due to healthcare expenses. This highlights a pressing need for a systematic approach, supported by a skilled healthcare workforce and robust policies, to ensure universal access to healthcare services regardless of financial constraints (Mustafa et al., 2017). Efforts to advocate effectively for accessible healthcare must be comprehensive and coordinated to address this global challenge. The Sehat Card Plus initiative is a pivotal step in Pakistan's healthcare landscape, aiming to enhance the accessibility and affordability of quality healthcare services for its citizens (Bhageerathy et al., 2017).

Amidst this backdrop, understanding Sehat Card Plus's awareness, utilization, and satisfaction levels at tertiary care hospitals, particularly in Khyber Pakhtunkhwa (KP), holds paramount importance (Nisingizwe et al., 2020). This introduction delves into the significance of assessing the Sehat Card Plus program's implementation at a tertiary care hospital in KP, shedding light on its implications for healthcare accessibility, patient satisfaction, and overall healthcare system effectiveness (Forman et al., 2022).

In Khyber Pakhtunkhwa, Pakistan, significant challenges plague the health sector, contributing to poor health outcomes compared to neighboring regions. The identified weaknesses of the current health sector strategy include limited access to healthcare services, poor quality of care, inadequate managerial capacity, and systemic underfunding

(Khan and Hussain, 2020). These issues hinder efforts to achieve Sustainable Development Goals, with indicators such as low rates of postnatal care utilization and incomplete immunization coverage reflecting the severity of the situation. Neonatal, infant, and maternal mortality rates remain distressingly high, underscoring the urgent need for comprehensive healthcare reform and investment in the region (Forman et al., 2022). The Social Health Protection (SHP) program in Khyber Pakhtunkhwa (KPK) has achieved notable success in enhancing healthcare accessibility and alleviating financial burdens associated with healthcare expenses. With its recent expansion, the program now covers over 7.2 million families in the province, constituting a significant proportion of the population. Across all provinces in Pakistan, more than 10 million families benefit from the program's coverage (AT and YATRA, 2023). Despite costing the KPK province approximately 2% of its budget, the economic benefits stemming from improved population health outcomes justify these investments. Coverage is available in public and private healthcare facilities, which is apt since over 70% of the people in Pakistan, whether based in urban or rural areas, seek healthcare from private hospitals. Utilization has surged, and claims have seen a four-to-five-fold increase as well, especially after the universal rollout of the program, underscoring the program's growing impact and demand for healthcare services (Forman et al., 2022). Thus the main objective of this study is to assess the awareness, utilization, and satisfaction of Sehat Card Plus at a tertiary care hospital in Khyber Pakhtunkhwa.

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Methodology

This cross-sectional study was conducted at a private-sector tertiary care hospital in Peshawar, Khyber Pakhtunkhwa, from August 2022 to January 2023. The study included 463 patients visiting the hospital. Data was collected through a non-probability convenience sampling technique. The sample size was calculated using a WHO calculator.

The study's inclusion criteria encompassed patients who visited a private tertiary care hospital in Peshawar, Khyber Pakhtunkhwa, from August 2022 to January 2023. Participants were required to be 18 or older and willing to participate in the study. Additionally, patients were included if they possessed data regarding awareness, utilization, and satisfaction related to the Sehat Card Plus program, which was the primary focus of the investigation.

Conversely, the exclusion criteria specified that individuals under 18 were not included in the study. Patients who did not seek medical attention at the designated tertiary care hospital during the specified timeframe were also excluded. Furthermore, individuals who declined to participate or consent to the study were not considered. Additionally, patients with incomplete or missing data regarding their awareness, utilization, or satisfaction with the Sehat Card Plus program were excluded from the analysis to ensure the integrity and reliability of the findings. A structured questionnaire was developed to gather data on participants' awareness of the Sehat Card Plus program, their utilization of the card for healthcare services, and their satisfaction with its benefits and coverage. Trained interviewers administered the questionnaire to eligible patients during their hospital visits. Demographic information, including age, gender, socioeconomic status, and previous healthcare utilization patterns, was also collected to characterize the study population. Informed consent was taken from all participants. Approval from the institutional review board was taken.

Data were collected and analyzed using SPSS 29. The questionnaire data were analyzed using descriptive statistics to determine awareness, utilization, and satisfaction levels. Frequencies and percentages were calculated for categorical variables.

Results

Data were collected from 463 patients. The mean age of participants was 42±11.5 years, and the gender distribution was 45% female and 55% male. Socioeconomic status analysis revealed that 67% of participants belonged to low-income households, while 17% were classified as middle-income and 16% as high-income. Educational levels varied, with 9% having no formal education, 17% primary education, 25% middle education, 33% enrollment, and 16% having completed higher secondary education or above. Regarding family income, approximately 32% reported earning less than 30,000, 18% earned between 31,000 and 50,000, 24% earned between 51,000 and 70,000, and 26% earned 71,000 and above. Almost half of the participants resided in urban areas (54%), while the remaining were in rural areas (46%).

82% of respondents were aware of the Sehat Card Plus program, with television being the most common source of awareness (33%), followed by social media (27%) and word

of mouth (29%). However, only 73% knew who was eligible for the program, and 53% knew the services covered. Surprisingly, only 39% knew that the services were 100% free. While 27% had personally used the Sehat Card for hospital admission, 63% reported that their family members had previously availed of services under the Sehat Card Plus. Among those who used the card, 47% had utilized it once, 32% twice, and 21% more than twice, mainly for medical treatment (42%) and surgical treatment (34%). The majority (68%) visited private hospitals or clinics. Only 27% reported experiencing any discrimination. Most participants (82%) fully utilized the available funds, and 83% received free medications after hospital discharge, including credit card plus services. Most participants (53%) faced no barriers or challenges while utilizing these services.

59% of participants were satisfied with the Sehat Card Plus program, while 22% were neutral, 13% were dissatisfied, and 6% were very dissatisfied. Most respondents wished for an increase in the fund limit (89%). Additionally, 84% recommended that the government initiate similar programs or schemes, and 79% would recommend treatment under Sehat Card Plus to others. Regarding ease of access to healthcare services, 32% found it easy, while 36% faced difficulties. The overall quality of services received under Sehat Card Plus received a mean rating of 7 (on a scale of 1 to 10, with 1 meaning poor service and 10 meaning excellent service).

Table 1: Demographic data of participants

Characteristic	Value
Total Participants	463
Mean Age (years)	42 ± 11.5
Gender	
Female %	45
Male %	55
Socioeconomic Status	
Low-income (%)	67
Middle-income (%)	17
High-income (%)	16
Education	None: 9% Primary: 17% Middle: 25% Matric: 33% Higher Secondary and above: 16%
Family Income (approx.)	Less than 30k: 32% 31k to 50k: 18% 51k to 70k: 24% 71k and above: 26%
Family Size	Mean: 5
Earning Members	Mean: 2
Residence	Rural: 46% Urban: 54%

Table 2: Awareness and Utilization of SSP

Question	Response
Awareness about Sehat Card Plus	Yes: 82% No: 18%
Source of Awareness about Sehat Card Plus	TV/Radio: 33% Social Media: 27%

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	Word of Mouth: 29% Others: 11%
Knowledge regarding eligibility for Sehat Card Plus	Yes: 73% No: 27%
Knowledge regarding services covered under Sehat Card Plus	Yes: 53% No: 47%
Awareness about services is 100% free	Yes: 39% No: 61%
Personal use of Sehat Card Plus for hospital admission in the past	Yes: 27% No: 73%
Use of Sehat Card Plus by any family member in the past	Yes: 63% No: 37%
Number of times responder has used Sehat Card Plus	Once: 47% Twice: 32% More than twice: 21%
The kind of treatment availed.	Medical Treatment: 42% Surgical Treatment: 34% Dialysis: 16% Other: 8%
Kind of healthcare facilities visited for Sehat Card Plus services	Government Hospitals: 32% Private Hospitals or Clinics: 68%
Observed or felt discrimination because of Sehat Card Plus	Yes: 27% No: 73%
Fully utilized available funds	Yes: 82% No: 18%
Provided with free medications after hospital discharge	Yes: 83% No: 8% Not Needed: 9%
Any barriers or challenges encountered in utilizing services	Procedure/Treatment not available or covered: 14% Specific doctor not available: 7% Long Wait Time: 11% Administrative issues/delay: 15% None: 53%

Table 3: Satisfaction of patients regarding SSP

Question	Response
Overall satisfaction with Sehat Card Plus	Very Satisfied: 27% Satisfied: 32% Neutral: 22% Dissatisfied: 13% Very Dissatisfied: 6%
Wish for Sehat Card Plus fund limit to be increased	Yes: 89% No: 11%
I recommend that the government initiate similar programs/schemes.	Yes: 84% No: 16%
Recommend treatment under Sehat Card Plus to others	Yes: 79% No: 21%
Ease of access to healthcare services under Sehat Card Plus	Very Easy: 11% Somewhat Easy: 21% Neutral: 32%

	Somewhat Difficult: 28%, Very Difficult: 8%
Quality of services received through Sehat Card Plus	Rating (1 to 10): Mean 7

Discussion

The study found that many participants were aware of the Sehat Card Plus program, with television and social media being the primary sources of awareness. However, there was a notable gap in knowledge regarding eligibility criteria and covered services (Nikoloski and Mossialos, 2018). This highlights the need for targeted educational campaigns to improve understanding among the population. Despite awareness, utilization rates were moderate, with many participants reporting never having used the Sehat Card Plus (Hasan et al., 2022). Barriers such as limited availability of covered services and administrative challenges may have contributed to underutilization (Yasmin, 2022). Addressing these barriers through increased provider enrollment and streamlined administrative processes could enhance program uptake. Overall, satisfaction levels with the Sehat Card Plus program were mixed, with some participants expressing satisfaction while others reported dissatisfaction (Naz et al., 2021). Satisfaction was significantly influenced by factors such as ease of access to healthcare services and perceived quality of care received. Participants who encountered fewer barriers and received high-quality care were more likely to be satisfied with the program (Aman). The government of Pakistan launched the Sehat Sahulat Program in 2015 as a social health protection initiative providing UHC to low-income families in the country. Sehat Card Plus can be considered an offshoot of this program. It is a micro-health insurance program for all the citizens of Khyber Pakhtunkhwa (KP) province of Pakistan, launched in 2021 by the provincial government. Under the program, more than 7.6 million KP families are enrolled and getting free inpatient healthcare services without out-of-pocket payment. These services are provided through a panel of public and private hospitals contracted across the province. The program covers a host of secondary and tertiary healthcare diseases. Over 1.6 million patient visits have been availed under this program to date.

The "Sehat Sahulat Program" is a collaborative health insurance initiative between the federal and provincial governments to cover healthcare expenses for low-income individuals. Its primary objective is to alleviate the financial burden on people experiencing poverty by reducing out-of-pocket healthcare expenses, ultimately reducing poverty (Koochpayehzadeh et al., 2021; Saeed). Sehat Card Plus can be considered an offshoot of this program. It is a micro-health insurance program for all the citizens of Khyber Pakhtunkhwa (KP) province of Pakistan, launched in 2021 by the provincial government. Under the program, more than 7.6 million KP families are enrolled and getting free inpatient healthcare services without out-of-pocket payment. These services are provided through a panel of public and private hospitals contracted across the province. The program covers a host of secondary and tertiary healthcare diseases. Over 2.3 million patient visits have been availed under this program to date (Khan et al., 2023).

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Treatment coverage is up to Rs. 400,000 per family member per year, which can potentially be extended on a case-to-case basis (Yilmaz and Shakil, 2021). This initiative is crucial considering that over 70% of healthcare expenses in Pakistan are borne out-of-pocket, disproportionately affecting the lower middle class and impoverished populations (Bashir and Kishwar, 2021).

Conclusion

It is concluded that awareness of the Sehat Card Plus program is notable, but substantial gaps exist in understanding eligibility criteria and covered services among participants. Despite moderate utilization rates, limited service availability and administrative challenges hinder optimal program uptake. The satisfaction with services under this program is moderately high, and the population is in a significant demand for the government to introduce similar schemes.

Declarations

Data Availability statement

All data generated or analyzed during the study are included in the manuscript.

Ethics approval and consent to participate

Approved by the department Concerned.

Consent for publication

Approved

Funding

Not applicable

Conflict of interest

The authors declared absence of conflict of interest.

Author Contribution

SIKANDAR SHAHZAD IMRAN (Associate Director)

Study Design, Review of Literature.

Conception of Study, Development of Research Methodology Design, Study Design,, Review of manuscript, final approval of manuscript.

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Conception of Study, Final approval of manuscript.

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Manuscript revisions, critical input.

Coordination of collaborative efforts.

SATWAT BATOOL (Quality Assurance Officer)

Data entry and Data analysis, drafting article.

Data acquisition, analysis.

Coordination of collaborative efforts.

References

Aman, S. TRANSFORMING PUBLIC SECTOR THROUGH DIGITAL GOVERNANCE INITIATIVES IN KHYBER PAKHTUNKHWA: BUREAUCRATIC CONDUCT, TRANSPARENCY IN SERVICE

DELIVERY AND CITIZEN CENTRIC E-GOVERNANCE.

AT, I. B., and YATRA, A. (2023). 4 Mantras to Play Pivotal Role in the Life of Every Student: LG.

Bashir, S., and Kishwar, S. (2021). Incidence and determinants of catastrophic health expenditures and impoverishment in Pakistan. *Public health* **197**, 42-47.

Bhageerathy, R., Nair, S., and Bhaskaran, U. (2017). A systematic review of community-based health insurance programs in South Asia. *The International journal of health planning and management* **32**, e218-e231.

Forman, R., Ambreen, F., Shah, S. S. A., Mossialos, E., and Nasir, K. (2022). Sehat Sahulat: A social health justice policy leaving no one behind. *The Lancet Regional Health-Southeast Asia* **7**.

Hasan, S. S., Mustafa, Z. U., Kow, C. S., and Merchant, H. A. (2022). "Sehat Sahulat Program": a leap into the universal health coverage in Pakistan. *International Journal of Environmental Research and Public Health* **19**, 6998.

Khan, S. A., Cresswell, K., and Sheikh, A. (2023). The notion of access to health care in a large-scale social health protection initiative: a case study of 'Sehat Sahulat Programme' at Khyber Pakhtunkhwa, Pakistan. *Journal of Global Health Reports* **7**, e2023024.

Khan, S. U., and Hussain, I. (2020). Inequalities in health and health-related indicators: a spatial geographic analysis of Pakistan. *BMC public health* **20**, 1800.

Koohpayehzadeh, J., Azami-Aghdash, S., Derakhshani, N., Rezapour, A., Kalajahi, R. A., Khasraghi, J. S., Nikoomanesh, M., Sabetrohani, H., and Soleimanpour, S. (2021). Best practices in achieving universal health coverage: A scoping review. *Medical Journal of the Islamic Republic of Iran* **35**.

Mustafa, T., Zhou, L., Abdullahi, Z. J., and Nisar, N. (2017). Measuring the Performance of Micro-Health Insurance Schemes in Pakistan Based on Novel Adaptive Neural Network Classifier. *European Journal of Contemporary Research* **6**.

Naz, L., Ghimire, U., and Zainab, A. (2021). Behavioral factors associated with utilization of healthcare services among elderly in Pakistan: evidence from a nationally representative survey. *BMC geriatrics* **21**, 1-11.

Nikoloski, Z., and Mossialos, E. (2018). Membership in Seguro popular in Mexico linked to a small reduction in catastrophic health expenditure. *Health Affairs* **37**, 1169-1177.

Nisingizwe, M. P., Tuyisenge, G., Hategeka, C., and Karim, M. E. (2020). Are perceived barriers to accessing health care associated with inadequate antenatal care visits among women of reproductive age in Rwanda? *BMC pregnancy and childbirth* **20**, 1-10.

Saeed, A. POLICY MAKING AND IMPLEMENTATION PROCESSES OF PUBLIC HEALTH INTERVENTIONS: A CASE STUDY OF SEHAT SAHULAT PROGRAM.

Yasmin, S. (2022). EXPLORING PUBLIC AND PRIVATE PROVIDERS EXPERIENCE WITH SEHAT SAHULAT PROGRAM IN PAKISTAN.

Yilmaz, I., and Shakil, K. (2021). Pakistan Tehreek-e-Insaf: Pakistan's iconic populist movement.



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