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Under-utilised opportunity: key contribution of public health nurses and school health services for outreach in Delhi, India

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ABSTRACT

Background: The post of Public Health Nurses (PHNs) was created and filled for the first time in Delhi Administration, in 1978-79 under School Health Scheme (SHS) to provide services to school children but overtime they were utilised in public health activities without changing their job profile. This paper presents a history of development of SHS in Delhi and the various roles that PHNs played through it and present a case study of SHS in Delhi.

Methods: A systems approach was used to study SHS as a part of Directorate of Health Delhi. Purposively selected school health clinics in East and North East Districts managed by Government and NGOs were studied. Review of reports, observation and interview checklist were used.

Results: PHNs in SHS provided comprehensive services to school children. Since end of 1988 they were diverted to various public health activities. SHS covered nearly 40-50 percent government schools with no further expansion. Staff was transferred / posted to new hospitals and districts during end of 1990s. In 2002-03 Non-Government Organisations (NGOs) were involved to cover schools but by end of 2010 many NGOs withdrew from scheme.

Conclusions: Based on findings, this paper argues that, while PHNs played vital public health roles in the 1970s and 80s, policy changes in governance and service structures have diminished their role since late 1990s. Other options tried by government in 2000s, such as opening SHS to NGOs, have largely failed. The under-utilised potential of PHNs needs to be recognised and better deployed.

Keywords: Involving NGOs, Public health nurses, School health scheme

INTRODUCTION

Importance of school health services (SHSs) as a public health activity has been acknowledged across countries since the 20th century.

In several developed countries school health programmes evolved during post-second world war period and addressed problems of nutritional and physical fitness. In Britain and several European countries it was an integral part of educational system. Students today may face

health problems, stress, peer pressure, which increases both their physical and mental health needs.

School nurses perform a critical role within school health programme by addressing children's major health problems. This role includes providing preventive and screening services, health education and treatment for chronic illness, first aid in emergencies, referral and promotion of a healthy school environment. The school nurse is meant to be a liaison between school authorities, family, health care professionals, and community.¹

School health services in India

The earliest efforts to provide SHS were seen in several British ruled provinces and in princely states during the early part of the 20th century in India. As early as 1909, Baroda initiated medical inspection in schools. Services were provided mostly to boy's schools and gradually extended to cover girl's schools. Most private practitioners were hired for medical inspection of children wherever there were shortages of doctors but in few provinces like Bihar, Orissa, Delhi, West Bengal separate staff was appointed for medical inspection.¹ In 1940, central advisory board of health emphasised on need for SHSs and recommended appointing a committee to advice on nutrition, hygiene and medical inspection of children.

In 1941 a committee was set up under Chairmanship of the Directorate General, Indian Medical Services. Committee suggested recommended three types of medical inspection, a) full routine medical inspection at specified age; b) re-inspection of child found defective; and c) special inspection of children in between the routine inspections. It emphasised on treatment of defects, improvement of nutrition, provision of hygienic environment, maintenance of anthropometric measures and medical records for each child. The role of teacher to assist the doctor was considered essential.¹ The Health Survey and Development Committee (Bhore Committee, 1946) emphasised on importance of SHSs and endorsed recommendations by above committee.²

It also recommended that SHS to be a part of General Health Services and should be under health department. SHS was constitutionally a state subject but not much progress was observed over years. Therefore, in 1960 the Government of India (GOI) set up the Renuka Ray Committee to review the status of programme. This committee recommended expanding SHS gradually in rural and urban areas as there were structural constraints in terms of manpower. It also recommended human resources for SHS including the post of Public Health Nurses in urban areas.³ In late 1970s to strengthen the SHS, this programme was centrally sponsored by Ministry of Health, GOI. In 1981, Government appointed a task force on school health for intensification of the programme on a pilot basis.

Health Education Bureaus played an important role in providing health education material and training of staff but an evaluation in mid-1980s highlighted many lacunae in its implementation regarding human resources, financing and administration, which is present today in SHS of most states, including Delhi.

This paper presents a history of development of SHS in Delhi and various roles that Public Health Nurses played through it. Tracing history since the British colonial period through documentary evidence in the first section, it moves in the second section to present a case study of SHS in Delhi.

METHODS

A narrative review of secondary material and official documents helped develop history of SHS development in Delhi. 06 School Health Clinics (SHCs) and 16 schools under them were selected purposively in East and North East District of Delhi during 2004-05 for empirical study. Out of these 10 schools were under 04 government run clinics and 06 schools were under 02 NGO run clinics. Review of records and reports, observation checklist and interview checklist was used. This was part of a larger study designed to examine the nature of changes in the structure and functioning of Directorate of Health Services, Delhi, over the 1990s and 2000s. Data analysis was done using qualitative descriptive analysis.

RESULTS

School health scheme in Delhi

SHS existed in Delhi province by 1940s. Bhore Committee highlighted that in New Delhi school medical services covered a population of 4000 students. The scheme was under control of Chief Health Officer and treatment for minor ailments was provided to school children, employed dentists and oculists on part time basis. A part of cost was received from students by charging a fee. In Delhi, SHSs have been provided by three local bodies i.e. MCD, NDMC and DCB respectively under their jurisdiction. In Delhi city two Medical Officers from the provincial administration were employed and were under the Chief Health Officer. The services were not well organised in Delhi City as compared to those in New Delhi.²

History of development of school health scheme in DHS and role of public health nurses (1979-2000 Onwards).

On recommendation of National Development Council, in 1979 SHS was transferred to state sector and since then, in Delhi, implemented under Department of Medical and Public Health, Delhi Administration. The SHS was set up as an isolated structure with separate staff and weak referral linkages with General Health Services.

Each SHC catered to about 5000-6000 children, in cluster of 6-8 schools located around radius of 3- 4 km. Staffing of clinic was as per the recommendation of the Renuka Ray Committee i.e. 1 School Medical Officer, 1 Public Health Nurse (PHN), 1 Pharmacist and 1 Male and 1 Female Attendant.³

This was first time the post of PHN was sanctioned and filled in DHS, Delhi. Specialist services for Eye, ENT and Dental were provided through the Specialist Referral Centers under SHS. The SHS provided comprehensive outreach services to school children and was supposed to emphasise on promotion of health and reach out to families and community.⁴

SHS under the Directorate of Health Services (DHS), Delhi, was started in 1978-79 (5th FYP, 1974-78). Post were created for the six clinics and initiated SHSs in the trans Yamuna area of Delhi. The scheme was expanded during 7th five year plan (1985-90) and 64 SHCs and 5

specialist referral centers were opened in East, South, Central and West Delhi, catering to Government and aided schools under Delhi Administration. It could not be extended to North Delhi due to an austerity drive and ban on service expansion by GOI.⁵

Table 1: Chronology of developments in school health scheme (DHS, Delhi) and utilisation of public health nurses (1978-79-2005 onwards).

Period	Designation of in-charge SHS	Number of school health clinics	Status/changes	Activities by PHN in SHS	Activities by PHN in other Public Health Programmes/Activities
1978-79 to 1985	Officer on Special Duty (OSD), DDHS, In-Charge	Started with 06 SHCs in trans Yamuna area to cover 92 schools.	10 posts of PHNs were sanctioned and filled for the first time in DHS Expansion in phased manner in West, South, North and remaining East Delhi	PHNs worked as school health nurse in school clinic in setting up clinic, examination of students, immunisation, health education, sanitation survey, school health committee activities.	Nil
1985-1992	Deputy Director	Expanded clinics in all parts of Delhi i.e. 64 SHCs in phase manner expanded except in North Zone	Post of DD. (SHS) filled as by recruiting Public Health Specialist SHS involved in various public health activities	Continued above activities	Training of ANMs, teachers, AWWs. Participation in other outreach activities: Leprosy Survey, Mass immunisation activities. Prevention of Heart Diseases and Rheumatic Heart Diseases Programme. Cholera epidemic (1988), awareness, survey activities, ORS distribution Initiated Mobile Health Scheme 1988-1992
1993-1997	Chief Medical Officer and Public Health Specialist	64 SHCs	Deputy Director SHS took retirement and CMO and D.D. posted alternatively Delhi had assembly and Health Minister took initiative in public health activities	Continued above activities few clinics sanitation survey and school health committee activities	Worked 3 days in SHS and 3 days in MHS Special Health Check Up was Implemented IDD Programme and Salt testing Training of teachers and ANMs
1997-2005	CMO (SHS) GDMO	54 SHCs decreased to 16 SHCs	Some PHNs transferred to MHS and some with GNM + PHN Diploma to hospitals as they were on seniority list of hospital cadre During late 1990s some doctors transferred to new hospitals and on other hand few doctors appointed on contractual basis Since 2002-03 NGOs involved in schools not covered by Government SHS In 2003-04 some PHNs transferred to 09 districts	Continues Above activities except no sanitation survey and school health committee activities were performed PHNs conducting screening of students and handling minor disorders and emergencies even if no doctor was posted in clinic but no standing instructions provided to PHNs for above activities	Health camps and campaigns. Emergency flood duties, Kavar camp duties Special Health Check up, Pulse Polio Campaign, Data Collection for SHIB Flourosis Mitigation Programme Matriya Suraksha Abhiyan along with the Directorate of Family Welfare for the antenatal mothers; Motia Bind Mukti Abhiyan; Kavar Sewa Camp; Bhartiya Scouts and Guide Camp; 26th January parade first aid post duty; Stree Shakti Camps; Census of India; request for medical examination of students by Amar Jyoti School, an integrated school for physically challenge children, and some of the private schools

2005 Onwards	2006-07 Deputy Director 2007-09 C MO	16 SHCs	Some of the NGOs withdrawn from SHS Some PHNs appointed on contract	Continued above activities	13 PHNs involved in establishment of DSHM on lines of NRHM in Delhi.
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Source: 4-12 Old Records of SHS, Reports of DHS, interviews and observations.

The major activities of school health team are a medical check-up, emergency and first aid, referral, follow-up, immunisation and health education, along with ensuring a healthy school environment. Over time medical component remained but sanitation survey and its follow up were given up. Instead, PHNs were assigned tasks of other public health programmes including data collection and other outreach activities. Since 1993 after Delhi Assembly election, the Health Minister of Delhi initiated many public health outreach activities such organising health camps on mass occasions for religious, sports and other activities, awareness campaigns during epidemics, pulse polio, etc. Earlier some activities during epidemics and disasters were organised by local bodies.

As per reports and interview with staff it was found that from 1978-79, PHNs posted in SHS have performed school health activities and 1985 onwards in addition other public health roles as well. An in-depth study of the utilisation of PHNs revealed their utilisation in various public health activities during 1980s, 1990s and 2000 onwards as mentioned above in Table 1. PHNs are working in school and mobile health clinics and a few are posted in districts dispensaries (same work as ANMs). Their job responsibilities have not been reviewed since long and stated job responsibilities do not relate to specific changes in policies and programmes.¹⁵ PHNs in SHS and their supervisors are not clear about their role as PHN in public health activities; there is no supervisory post of District PHN or District PHN Officer in Delhi.

Case study – school health scheme 1990-2000 Onwards

During middle of 1990s, the era of health sector reforms was evident. The vision of political head and administrators was to reform the SHS by involving Non-Government Organisations (NGOs) in the scheme. 10th Five Year Plan document mentioned that “it was observed by the administrators that it was not economical by opening more SHCs and carrying out the periodic check-up through routine government staff.

Therefore it was proposed to carry out school health check through NGOs and the existing staff of SHS could be readjusted in other health institutions. With minimum cost all the school children in Delhi can be covered in a year if the task were assigned to NGOs. Only supervision and technical support can be provided by officers of Directorate of Health Services to NGOs for effective implementation of School Health Check Up in the schools”. The ongoing plan scheme “School Health Scheme “was proposed to be ‘abolished’ and handed over to NGOs, subject to change of nomenclature of this

scheme by Planning Commission, Government of India and Delhi Government” But this plan was not implemented and the SHS was providing services through both government staff and through NGOs. The Chief Medical Officer, SHS was responsible for oversight of government and NGOs components.¹⁶ During mid-1990s many lacunae in terms of human resource, supplies and supervision and monitoring were pointed out.

Human resource

During the period 1985 to 1997, scheme was headed by a public health specialist as Deputy Director SHS. During 1997-2000s it was headed by a chief medical officer (GDMO). The Public Health Specialist was trained for public health with a systems vision of health promotion and prevention of disease and epidemiology. The GDMOs were trained for curative hospital work and population based systems thinking was not their perspective. The impact of this difference was evident in functioning of SHS as number of medical examination was given importance rather than on promotion of health and health education activities.

Since 1978-79 regular staff was recruited for SHCs. In 1997-98 sanctioned posts in SHS were reduced from 71 to 51 and 5 posts of specialists were reduced. During this time many new hospitals were commissioned and 20 Medical Officers, 5 Specialists, few pharmacists and attendants were transferred to hospitals being set up and these posts were adjusted in hospitals as per suggestion by Administrative Reform Department, Delhi Government.

Some PHNs were transferred to new districts formed in 2003. In 1997-98, some Medical Officers were appointed on contract basis to overcome shortage created by these changes, and after 2005 some of the PHNs were also appointed on contractual basis in SHS and in districts.

Drugs and supplies

Medicines and other supplies were provided for SHCs from the main store at the Head Quarter. All medicines were available in adequate quantity except for some dietary supplements, but SHS staff expressed that they should be provided basic routine medicines like analgesics, dietary supplements, ointments, eye and ear drops etc.

Antibiotics provided by store were not used in routine in clinics as students visited for minor ailments or in an emergency. Health education material was distributed by

the SHS HQ till early 1993 but after that no material has been provided to clinics. Various equipments were provided in schools like weight machine, BP instrument, thermometer, haemo-globinometer, refrigerator etc but it was found that in most of the clinics these were not functional.

SHS staff members expressed that equipment was not replaced for long time despite sending reminders to SHS HQ. In the 1980s PHNs were provided with standing instructions for handling emergencies and first aid and were providing medicines in absence of doctor. But since mid of 1990s standing instructions have not been reviewed and not provided to them, although PHNs were demanding these instructions as they are legal protection for PHNs when they handle emergency in the absence of a doctor.

Referral

Students were to be referred to specialist referral centers of the SHS for Eye, ENT and Dental problems and for other problems they were referred to Delhi government hospitals.

However, referral linkages were very weak as students were not given any preference therefore parents were reluctant to take students to government hospitals. In the late-1990s and 2000s, the referral weakened further since most of the specialists were transferred to hospitals from referral centers, thereby making the check-ups a ritual.

Records and reports

Various reports and records were maintained by the staff i.e. cumulative health record; medical examination, OPD, referral and follow-up, immunisation, health education registers; monthly and annual report etc. There was shortage of supply of printed cumulative health record formats, and staff was maintaining records in the register or plain papers. Even many a times monthly report formats were not available.

In-service training

No on the job training was conducted in the SHS HQ. Occasionally in-service sessions were organised to update the knowledge of staff during monthly visits or staff was nominated for attending trainings/workshops organised by DHS or outside institutions on other than school health.

Supervision and monitoring

Monthly meeting was conducted regularly and performance of clinics was assessed through monthly reports. Surprise visits were rarely conducted for monitoring the activities. No records of quality checks were available, whether for SHS staff run clinics or NGO run clinics.

Coverage

During 1990s comprehensive services were provided to the students. But during 2000s emphasis was given on screening of students to cover all the schools (Table 2 and 3).

Table 2: Number of schools covered versus students examined, referred, followed up and immunised by SHS 1991-2000.

Activities	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1998-99	1999-00
No of Schools Visited	235 (43.44%)	268 (49.54%)	317 (58.60%)	219 (40.48%)	436 (80.59%)	436 (80.59%)	436 (80.59%)	436 (80.59%)
Students Covered	1,62,421	1,68,607	3,00,258	1,74,456	3,59,763	3,62,400	3,92,157	4,15,536
Students Examined	59,400	89,815	1,31,242	95,875	72,108	87,849	71,174	62,419
No Referred	12,646	19,027	21,617	24,866	20,627	36,642	NA	NA
Old Cases Follow-up	8,427	8,464	9,922	NA	NA	NA	NA	NA
TT Immunisation	42,220	59,160	NA	NA	50,766	64,005	61,324	82,590

Source; 6-114-9, 131 Reports of SHS and DHS

Table 3: Number of allotted schools covered versus students examined, OPD cases and immunised by SHS 2000-2003.

Activities	2000-01	2001-02	2002-03
Total schools covered under SHS	436 (80.59%)	575 (100%)	575 (100%)
Total No of Students	4,16,175	5,44,732	5,32,299
Schools covered for Annual medical Examination	116	157	186
Number of children covered by Annual medical Examination	56,852	98,556	91,353
OPD Cases	1,77,285	1,85,876	1,94,282
TT Immunisation	86,676	94,700	72,472

Source; 131, 142 Reports of SHS.

Involving NGOs in school health scheme

In 1996-97 a private trust submitted a request to the then Health Minister to cover some of the schools in North Delhi as SHS under Delhi Government was not covering the schools there. After debates within the DHS and health department on the feasibility of the trust to cover schools with quality services, the decision was taken not to involve the trust in providing services to school children. In 1999, discussion on involving NGOs resurfaced and the decision was taken by Department of Health and Family Welfare in a meeting with then Health Minister that the responsibility of providing school health services may be given to NGOs and the existing SHS staff may be transferred to the Mobile Health Scheme. Planning and Finance Department of Government of Delhi studied the proposal and gave comments and suggestions. It was suggested that NGOs can be assigned coverage of schools which were not covered by SHS. SHS staff should not be transferred at initial stage of involving NGOs. Then CMO SHS worked out the costing and mentioned that it cost the Department Rs. 34.80/- per child per year to provide SHS and the cost by NGOs will be only Rs. 14.76. Secretary H&FW proposed rate of Rs. 10/- per child to be offered to NGOs as medicines, stationary and other logistics will be provided by the Delhi Government and NGOs will only provide staff. As this was a policy matter Cabinet approval was sought and in 2002-03, a decision was taken by the cabinet to hand over the scheme to NGOs. Training and guidelines were provided to each NGO for carrying out comprehensive services in each school in coordination with the Principal of the concerned school. Work guidelines for NGOs were prepared, similar to those for the government SHS.

It included medical examination, immunisation, handling emergencies and first aid, health education and referring and follow-up, sanitation survey, maintenance of records, submission of monthly and annual reports. The work of NGOs was to be monitored by CMO I/C SHS or other persons appointed by DHS. Staffing pattern was also to be similar to the government scheme. The NGOs were selected on a transparent basis. An MOU was signed by the respective NGOs with the Government of Delhi and submitted at SHS HQ; qualification and registration certificates of each team member of all the NGOs was verified by the SHS, and authorisation was issued to them.

Functioning of NGOs in SHS

NGOs were given guidelines to work on the same pattern as government SHS. But it was observed that majority of the NGO teams were not conducting examination as per guidelines as they were doing screening and just asking students if they have any problem; very less emergency and first aid treatment was provided and they refused immunisation activities.

Human resource

In some of the teams it was observed that there were 2-3 doctors with 2-3 nurses and they were examining students simultaneously in 2-3 class rooms. There was no pharmacist in most of teams. Nurse/ANM was distributing the medicines to students. Turnover of staff was very high as NGOs were paying very low salaries to staff. In this way pattern of functioning of government SHS and NGO SHS teams was different in many aspects.

Drugs and supplies

Drugs and supplies were distributed to the NGOs from the SHS store. NGOs demanded medicines quite frequently and a SHS store was providing them with required indent but without any verification of previous consumption. The researcher, being a part of the scheme, had first hand experience of going through their records and it was found that there was no relationship between medical examination register, OPD register and medicine consumption register.

Cumulative health record formats and stationary were provided to NGOs as per their demand, even though during same period no cumulative health record were issued to government SHS. The NGOs, thereby, faced no shortage of medicines or cumulative records or registers.

Reports and records

The Researcher, as part of the SHS, had found that the NGO records were not maintained as per guidelines and often were not even clearly legible. Some of the NGOs tried to manipulate records and when discrepancies were pointed out they changed all registers. The monthly reports sent to SHS HQ were also not up to the mark as compilation of morbidity was faulty and discrepancies were found. Referral and follow up data was not available.

Supervision and monitoring

Supervision and monitoring system was very weak, with the CMO SHS rarely visiting schools covered by NGOs. Even data reported itself revealed the limited performance in any meaningful way; as compared to the government staff runs SHCs.

Coverage and regularity of coverage

Following the implementation of the scheme in 2002, 13 NGOs with 66 teams were involved and 381 schools were allotted to them. They started working in the month of January 2003 after appointing staff. At the same time 63 SHCs with 50 government teams covered 575 schools. During 2003-04, 13 NGOs with 75 teams expanded coverage to 668 schools and government staff ran 16 SHCs with 11 teams covered 137 schools as staff was transferred to hospitals and districts. In 2004-05, 5 NGOs

less, i.e. 8 NGOs with 48 teams covered 668 schools and government same as 2003-04 (Table 4).

Many teachers and students told that NGOs were completing medical examination in 2-3 days and were not providing medicines for more than one day or were giving one dose then and there. One of the Principals said that she was not satisfied with the work of NGOs and many a times same staff was not coming in the school and she could not allow anyone to enter in a girl's school. She

expressed that government SHS was much better as they were available in the school and provided medicines and first aid to students. During the annual audit it was found that one of the reputed NGOs had reported conducting medical examination of students during the examination days and vacations in the schools. School principal was contacted on phone and he agreed that during examination few students were examined but during vacation no students were available in the schools.

Table 4: Achievements of Government SHS versus NGOs SHS.

SHS Government				SHS NGOs			
	2002-03	2003-04	2004-05		2002-03	2003-04	2004-05
SH clinics	63	16	16	No of NGOs	13	13	08
Teams	50	11	11	Teams	66	75	48
Total schools allotted	575	137	137	Total schools allotted	381	668	668
Total students enrolled	532299	131424	125689	Total students enrolled	430117	718426	718426
Total students covered	419315	143910	80591	Total students covered	137499	501092	272379
Medical check up	225033 53.66%	37372 25.96%	45568 56.54%	Medical	131142 95.37%	472210 94.23%	258551 94.92%
OPD	194282 46.33%	106538 74.03%	35023 43.45%	OPD	6357 4.62%	28882 5.76%	13828 5.07%
TT immunisation	72472	13595	29922	TT immunisation	18440	60311	26697
% not possible as total students 6 th and 10 th not available							

Source; 11, 12 Reports of SHS.

Many NGOs defaulted on quality of services. As per guidelines 65 students were to be examined in a day but they were conducting examination for 100-125 students in one shift. As per the previous experience of SHS the limit of 65 was calculated as the team had to do medical, health education and complete records. NGOs were not happy with payment system as they said payment was less and they were not able to get qualified staff and not able to save anything although SHS was providing them medicines, stationary and other supplies. Their staff was reaching schools of their own, monthly payment was done to staff by NGOs. There was frequent changeover of medical officers due to low pay. NGOs were not able to employ qualified GNM nurses therefore they had employed ANMs to work in teams. Although they were required to employ pharmacists in each team but very few pharmacists were actually employed.

In this way NGOs were not having the same team members as per government norms. They were concentrating on medical examination rather than on OPD services, immunisation and health education. In this way they were not providing comprehensive services to the students in the schools. Payment was given to teams for the comprehensive services to be provided to the children in schools. NGOs were demanding extra payment from the government for immunisation but government had not agreed for it. Referral and follow up data was not available in the reports of NGO. It was

observed that NGO had referred the students to hospitals but follow up was very poor and irregular.

In 2004-05 one NGO working in SHS was black listed for some financial irregularities in mobile health scheme, two had withdrawn themselves and two were not given schools as they had not provided the complete reports and had problem in bills and their payment was not done as records had to be verified. Some of the NGOs withdrew teams as they said they were not able to meet salary and vehicle expenses, payment was delayed by the government, and many staff members left work with NGOs. But after 2005-06 many NGOs refused to work as they were not satisfied with amount of payment and disbursement of payment was late due to time required for the processing of bills.

DISCUSSION

To conclude, the PHNs were recruited for SHS but utilised in various outreach public health activities, can be leaders by demonstrating their potential as mid-level managerial public health work force. But over time there was a gap between their training and job and their supervisory role was lost.¹⁵ In 2016, even the MOHFW, GOI has recommended to train nurses as Community Health Officers after a six months bridge course. PHNs in DHS, Delhi can be trained, provided with standard norms and instructions to work in clinics and be utilised in supervisory capacity in districts/RCH activities. Doctors

with clinical expertise can be used in dispensaries, hospitals and specialist clinics. The health sector reforms in 1990s focused on strengthening public health sector management and private sector involvement in medical services. This resulted in change in the role of state governments in provision of services, introduction of contractual appointments, user fee, decentralisation of services etc. This redefined the role of state from provisioning and financing to a part provider and regulators.¹⁷ Specific measures adopted as reforms in health services varied across states. Wide range of reforms implemented includes formation of autonomous societies and including NGOs rather than strengthen the public sector.¹⁸

Although in Delhi SHS, NGOs were involved in various activities under various programmes. In SHS, NGOs were involved to cover schools not covered by Government SHS but over time health department was forced to review the decision to implement the scheme of its own. This significant role of the public services in preventive and promotive activities has been demonstrated in other contexts as well. Under the National Rural Health Mission, School Health Scheme has been given priority and suggested to implement the programme to fulfill specific needs of adolescent.¹⁹ The role of PHNs in this and in other public health activities needs to be optimised.

CONCLUSION

Based on findings, this paper argues that, while PHNs played vital public health roles in the 1980s and 90s, policy changes in governance and service structures have diminished their role since late 1990s. Other options tried by government in 2000s, such as opening SHS to NGOs, have largely failed. The under-utilised potential of PHNs needs to be recognised and better deployed.

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