

Original papers

Quality of cervical screening in the Well Woman clinics in Kalutara District

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Abstract

Introduction

The objective of this study was to assess the quality of cervical screening services in Well Woman clinics in the Kalutara District.

Methodology

A cross sectional survey of service provision, availability of physical facilities, performance of clinic activities including cervical screening in Well Woman clinics (WWC) and quality of follow up of clients in the clinics and field was carried out.

A scoring system was developed for assessing quality and a consensus standard of quality was set by a panel of experts.

Results

All clinics (100%) performed Pap smear testing, but only three of the seven clinics conducted four or more clinic sessions a month per DDHS area as recommended in the guidelines sent by the Ministry of Health.

The percentage mean scores of quality were: availability of required physical facilities in the WWCs - 73%; performance of general activities - 70%; cervical screening procedures - 39.8%. Consensus by experts on expected percentage for above indicators of quality was >90%.

The mean duration between Pap test and receiving the report was 3.4 ± 2.25 months. Four (9%) clients with abnormal reports were lost to further care. Only one (1) referral from the WWCs to gynaecology clinics, of 162 referrals were referred back to WWC from the gynaecology clinics.

Conclusions

Facilities and service provision in the WWCs need improvement. Follow up care has to be strengthened by issuing guidelines to staff working in WWCs and referral clinics in secondary care institutions. Staff in referral institutions needs to be oriented to provide care of referred patients. Delay of reporting on Pap smears has to be rectified.

Key words

Well women clinics; cervical screening; quality of services

Introduction

The Ministry of Health in 1996 with the assistance of United Nations Population Fund (UNFPA) set up 300 Well Woman Clinics (WWCs) in Health Units under the Divisional Directors of Health Service (DDHS) or Medical Officers of Health (MOH) in the country to implement a cervical screening programme. These clinics also offer screening for hypertension, diabetes mellitus and obesity. The services are provided free of charge by the government. In order to provide good quality care in a cost effective and efficient manner the programme has to be monitored. The evaluation of the cervical screening programme, which had been set up five years ago, is essential for assessing the coverage and the quality of care (1).

Quality improvement should occur at all levels of service delivery and can be studied under the following headings:

1. Structure- physical facilities, staffing numbers
2. Process- steps undertaken to perform procedures
3. Outcome- results of procedures undertaken

Problems of quality often relate to the process. Process is a series of events or tasks. Quality improvement emphasizes better outcomes by improving processes (2).

WHO (1994) identifies good quality services as services available safely and effectively as close as possible to the client community (3). Technically competent health care providers and clear guidelines/protocols should be available. All essential supplies and equipment should be available at hand (3).

The care provided should be comprehensive and include continuity of care with facilities and arrangements for follow up. Information and counselling for clients and respectful, non-judgmental services are other characteristics of quality health care (4).

In monitoring and evaluating the quantity and quality of the programmes it is essential to observe whether the objectives have been achieved (5). Indicators facilitate measuring the changes, towards attaining objectives. Such indicators in areas of accessibility, utilization and quality of care have to be developed (5).

As stated by Bindari-Hammed and Smith (1992) much of the information required for assessing

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quality of care can be collected by utilizing a checklist or a simple scoring system (4).

Use of both documented and interview data are helpful in complementing the data from one source with another. This method helps in triangulation to validate information collected automatically (6).

Methodology

Romer and Montoya-Aguliar in 1988 identified that in developing countries the information system is weak (7). Hence in order to obtain valid data to assess the quality of cervical screening services, a wide range of approaches was used in this study.

Service provision, availability of physical facilities, performance of clinic activities and cervical screening were assessed using checklists. Follow up care and satisfaction of clients leaving the clinic was determined using an interviewer administered questionnaire. Documented data in the clinic were also obtained to assess the follow up.

The following indicators of quality of care including the recommended standards were developed by obtaining the consensus views of eight experts in disciplines of community medicine, gynaecology and health care providers of maternal and child health.

- Availability of physical facilities and performance of W.W clinic activities including cervical screening were assessed by non-participatory observation where the observer watched the situation, but did not participate (8).

Two checklists were used to assess the availability of facilities and performance of clinic activities. A third checklist was used to observe the client-service interactions during the cervical screening procedure among 10 clients.

The minimum standards of the requirement indicated in the checklists were prepared according to the guidelines issued by the Ministry of Health.

The presence of the items (criterion) in the checklist scored one mark and the absence of them scored zero. Mean, median and mean percentage scores were calculated for each and overall items in the check lists.

- Follow up care was assessed in the clinics by observing the maintenance of records and returns in the clinics for mean duration of time between performance of the Pap test and receipt of the reports, referral care for abnormal results and back referrals.

- Client satisfaction for the services offered was assessed by interviewing 100 clients after the utilization of clinic services. The number studied from each area was obtained by dividing the sample in proportion to the target population in each DDHS area.

- Compliance with advice was assessed by interviewing 51 clients in the field. They were selected randomly from clients who received WW Clinic services. Half of this sample had received the WWC service and the results were normal not requiring referral. In the other 50% of this sample results were abnormal and requiring referrals.

They were interviewed to appraise client satisfaction on clinic services and follow up care.

Results

All seven DDHS areas in Kalutara District conducted WWC in respective DDHS offices except one DDHS area which had one outreach WWClinic.

The number of WWC sessions was inadequate. Three DDHS areas (43%) conducted over 4 WWCs/ month. There was insufficient out-reach WWCs with only one DDHS area (14%) conducting WWCs in two centres including the MOH office. Two DDHS areas conducted WWCs in isolation while the other 5 DDHS areas conducted the clinics in combination with Maternal and Child Health / Family Planning (MCH/FP) clinics.

Quality of Physical Facilities

As shown in Table I, the median score for overall availability of physical facilities in WWCs was 40 (maximum=54) with a mean score of 39.6 ± 3.6 , which was 73% of the standard requirement.

Percentage availability of general facilities in the seven clinics was 79% and facilities to perform cervical screening were 68%. The mean score for availability of a separate location for different activities was 66% of which spaces for health education and client preparation were present in two and one clinics respectively. An adequate number of clean well maintained toilets were available in two clinics.

Table 2 shows that physical facilities to recommended standard of expert (90%) were available only in a limited number of clinics. None of the clinics had stationery and linen to the recommended level.

Table 1- Distribution of mean scores on quality of physical facilities in WWC in Kalutara district

Area of assessment (Category)	Criteria of assessment	Me- dian score	Mean score	SD	Maxi mum score	% score
1. Availability of general facilities	1. Environmental condition of the clinic	7	7.1	1.2	9	79
	2. Building facilities	3	3.3	.5	4	82
	3. Availability of separate locations for different activities	3	3.3	1.0	5	66
	4. Availability of minimum number of furniture	7	6.9	.7	8	86
	Total	20	20.6	2.0	26	79
2. Availability of facilities to perform cervical screening	1. Availability of equipments for cervical screening	13	13.3	2.1	18	74
	2. Availability of 6 months supply of stationery and registers and files	4	3.6	1.0	6	60
	3. Availability of adequate amount of linen	2	2.1	.9	4	54
	Total	19	19	2.8	28	68
Availability of physical facilities in the WWCs		40	39.6	3.6	54	73

Table 2- Distribution of 7 DDHS by the mean % score achieved by them assessing availability of physical facilities (n=7)

Physical facilities	Number of DDHS areas achieving mean % score			
	<67%	68%-78%	79%-89%	>90%
1. Environmental condition of the clinic	3	1	2	1
2. Building facilities	0	5	0	2
3. Availability of separate locations for different activities	5	0	1	1
4. Availability of minimum number of furniture	0	2	4	1
5. Availability of equipments for cervical screening	2	4	0	1
6. Availability of 6 months supply of stationery and registers and files	6	0	1	0
7. Availability of adequate amount of linen	4	3	0	0
Overall availability of physical facilities	1	4	2	0

Performance of general activities

All clinics in the selected DDHS areas performed Pap smear testing (100%). The overall availability of quality clinic services for the district based on the criteria shown in Table 3 was 64%.

Sterility was ensured over 90% in five clinics. Provision of health education to the clients was less than 67% in all seven clinics.

Performance of cervical screening in WWCs

As shown in Table 4 the overall scores on client

on cervical screening was 39% of the standard requirement. None of the clinics achieved the level recommended by the experts.

Health education talks were given before the commencement of screening, mainly focusing on breast cancer and diabetes and there was very little discussion on cervical cancer. They educated the clients about the importance of the Pap test but not about the necessity of repeat screening in five years.

Table 3- Quality assessment of general activities

Quality of performance of clinic services (criteria)	Median score	Mean score	S.D	Maximum score	% score
1. Availability of clinic services	1	1.4	.53	2	71
2. Organization of the WWC	13	13.2	1.4	16	83
3. Provision of health education	1	1.1	1.2	5	23
4. Ensuring sterility	5	4.6	.8	5	91
5. Maintenance of register, files and returns	9	8.3	1.0	11	75
6. Clinic supervision	0	0	0	2	0
Overall Quality of performances of general activities	25	26.1	1.86	41	64

Table 4- Percentage distribution of Quality of cervical screening procedure in DDHS areas in Kalutara District

Observations (No. of items)		DDHS areas							Total
		1	2	3	4	5	6	7	
1. Acceptance of the client (1)	Total	10	10	10	10	10	10	10	70
	Correct	7	7	3	4	5	6	6	38
	Percent correct	70	70	30	40	50	60	60	54%
2. Education on cervical screening (6)	Total	60	60	60	60	60	60	60	420
	Correct	37	40	5	32	10	18	23	165
	Percent correct	62	66	8	53	16	30	38	39%
3. Practice of correct procedure (15)	Total	150	150	150	150	150	150	150	1050
	Correct	125	127	116	135	109	116	122	850
	Percent correct	83	85	77	90	73	77	81	81%
4. Labelling of slides, filling of request forms and WWC cards (8)	Total	80	80	80	80	80	80	80	560
	Correct	60	48	53	48	59	47	48	363
	Percent correct	75	60	66	60	74	59	60	65%

They did not have IEC materials on cervical screening to show the clients.

It was also observed in all the clinics except in one that cervical screening was performed by the Public Health Nursing Sister (PHNS). Eighty-one percent of steps of the cervical screening procedure were performed correctly and according to the standard. There were some areas to be improved in taking the smear. None of the clinics' service providers moistened the speculum before introducing, it into the vagina.

The mean score for rotation of the spatula clockwise was 63% and for spreading of the smear evenly over the slide correctly was 62%.

Mean duration of time between the performance of Pap smear and receipt of the results
During the survey period 2310 Pap smear specimens had been sent for reporting for which 1962 reports (85%) had been received. In one clinic although some Pap smear reports had been received, they had been given to the clients without entering in the register.

In two clinics the results had been entered in the register but the dates of receipt of the reports were not entered. Hence, the mean duration of time could be analysed only in 1004 reports out of 1962 (51%). As shown in table 5 the mean and median duration between the Pap test and receiving the report were 3.4 ($\pm$ 2.25) and 3.2 months, respectively (Table 5).

Out of the 1962 Pap smear reports, 1924 (98%) were satisfactory. Forty-five (2.3%) of 1924 satisfactory smears had abnormalities.

Table 5- Mean duration of time between the performances of Pap smear and receiving the results by DDHS area in months

DDHS area	Months		
	Mean	Median	Standard error
Bulathsinhala	3.2	3.2	1.73
Horana	4.5	3.7	4.18
Bandaragama	3.8	4.0	2.89
Panadura	2.6	2.3	3.67
Matugama	6.1	4.8	9.52
Agalawatta	2.1	1.4	3.62
Walalawita	4.0	3.8	21.40
Total	3.4	3.2	2.25

Referrals for care of clients with abnormalities

Of the 2373 who had cervical screening during the survey period, 172 (3%) were identified as being abnormal on visual inspection. In six DDHS areas over 84% of abnormal visual inspection finding clients had been referred for further care to secondary institutions. In one DDHS area only 48% of the clients had been referred to the respective gynaecology clinics; the others were treated by the DDHS.

In the entire district, of the 45 clients with abnormal Pap smear reports, 19 (42%) were sent for referral care, while 22 (49%) Pap smears were repeated by the DDHS as requested by the pathologist. According to the registers four (9%) clients have been lost to further care.

Back referrals from the referral clinic

One (0.6%) of the referred clients (162) had been referred back to the WWC during the period 1996-2000 in the Kalutara district.

Follow up care of clients who attended the clinic

Out of 102 randomly selected clients who received WWC services, 98 (96%) could be traced in the field for the interview.

Out of the interviewed clients, 47 (48%) had received the Pap smear report. Thirty-nine (83%) of the clients said it took more than three months to receive the results. All the referred clients (50) with either abnormal visual inspection findings or Pap test were given a referral card, address of the gynaecology clinic and 84%, 62% and 32% of the clients were given information on the clinic date, clinic time and name of the VOG respectively.

Of the clients referred (50), 8 (16%) did not visit the referral clinic. Five clients said that they could not attend the clinic due to personal reasons and one client said she could not understand the instructions while two had ignored the instructions given at the WWC. Two (5%) had to visit the clinic three times to get themselves examined.

Three (7%) clients waited for more than 2 hours to be seen in the referral clinic. All the clients who attended the referral clinic accepted the treatment offered, and the reasons for the actions had been explained to them. None of the clients were referred back to the WWC from the referral clinic. Fourteen (28%) clients were visited by the PHMs after they had been referred to a gynaecology clinic. Overall satisfaction on follow up care given by the PHMs among clients that were visited was 65%.

Client satisfaction on clinic services

At exit interviews (n=100), the mean percentage of satisfaction for the clinic facilities and services varied between 64% and 68%. Ninety eight of the clients agreed that the time of the clinic was suitable for them. Of them, 84% said that the time they spent to see the service provider was reasonable, and 91% was of the view that the service provider spent enough time with them.

Only 12% of the clients had problems to be discussed, and out of them 67% said that they felt comfortable with the discussion. All clients said that they would recommend WWC service to the others.

Fifty four percent of clients said that it is essential to improve public awareness, 16% were of the opinion that it is necessary to have a separate clinic session and to improve building facilities; the need for more toilet facilities was stressed (14%).

Eighteen percent of the interviewed clients claimed that they did not understand the purpose of the Pap test and 3% could not understand the

explanation given on referral care. Fifty four per cent of respondents suggested the need for enhancing community awareness.

Discussion

A study revealed that the cervical screening coverage in the Kalutara District was 2.2% since the inception of the programme (9). Only three DDHS areas (43%) conducted more than four WWCs per month in compliance with the guidelines.

Highest cumulative cervical screening coverage (9.3%) was observed in Bulathsinghale where there were more than four WWCs per month. To increase the coverage and quality of care it is necessary to increase the number of clinics. The need for increasing manpower and physical facilities, increasing the number of clinics and establishing more outreach clinics was highlighted earlier (9). The cumulative cervical screening coverage (9.3% and 3%) was found in the two DDHS areas where WWCs were conducted on a day when other clinics were not held. Conducting WWCs on separate days without combining with MCH/FP clinics could improve the performance of activities.

The recommended standards of physical facilities (>90%) were reached only in a limited number of clinics. Availability of general facilities in the WWCs in the district was 79% and the availability of equipment to perform cervical screening was 68%. Attention should be focused to provide more toilets and separate locations for health education and client preparation.

Client acceptance at the clinics and education before the cervical screening procedure was very poor; the quality percentage scores for these two indicators were 54% and 39% respectively. The quality mean percentage score of practice of the correct cervical screening procedure was 81% and had not reached the recommended standard of 90%. Although the recorded data revealed that 98% of the smears in the district were satisfactory, there were some areas to be improved in taking the cervical smear, such as moistening of the speculum with water before introduction, the method of rotation of spatula at cervical os and spreading of smear over the slide.

The mean and median duration of time between the Pap test and receiving the report was 3.4 ± 2.2 and 3.2 months respectively. Considerable variation of the mean duration of time existed between the two events in individual DDHS areas. None of the areas received the reports within one month

of sending the sample as recommended by the WHO. These findings were confirmed by 83% of clients who were interviewed in the field, who claimed that it took more than three months for them to receive the report. Pap smear specimens in all the DDHS areas in the Kalutara District are sent to the Maharagama Cancer Institute for reporting. Since this undue delay may be due to the overload of the work in the laboratory, it highlights the necessity of establishing provincial or district level centres for Pap smear examination.

Out of 1924 Pap smear reports received in the district of Kalutara 2.3% (45) of the reports were abnormal. According to the Mausner and Bahn (1985), the prevalence of unrecognized disease in a community is dependent on the way the population had been screened (12). Hence it can be assumed that the low yield, could be due to poor cervical screening coverage which was 2.2% for the district (9).

Of the clients with abnormal findings, four (9%) clients have been lost to further care.

WHO (1988) states that loss to follow up of even a single patient with abnormal cytology means a failure of the programme (10). Therefore, it is essential to follow-up all abnormal smears effectively.

In all DDHS areas except in one, over 85% of clients who had abnormalities on visual inspections in the WWCs had been directed for referral care. In this area 48% of the clients had been referred to the respective gynaecology clinics and others were treated by the DDHS contrary to the recommended guidelines. This also indicates a lack of uniformity in the management. It indicates the necessity for clear guidelines to service providers on management of clients with abnormalities found on visual inspections, to prevent hazardous treatment.

Back referrals signify a good coordination between primary and secondary health care levels. Only one out of 162 clients (0.6%) directed for referral care was referred back to the WWC by the gynaecologist following treatment. This highlights the poor awareness on the National Cervical Screening Programme among the staff in other secondary care institutions or non-compliance with the programme requirements and the urgent need for orient the staff in these institutions. Regular monitoring would also ensure that the correct practices are followed.

Although the clients in the WWCs were compelled to wait a long time before being seen by the service provider, a majority (68%) acknowledged the waiting time was not too long. Percentage

means score of satisfaction for all services was 62%. At exit interviews none of the clients expressed dissatisfaction with the service. However, it must be kept in mind low client expectation would result in client being satisfied with even a relatively poor service. These findings compare with the findings of a research conducted in antenatal clinics in the Colombo District, where almost all consumers were satisfied with the service in spite of long waiting time at the clinic (11).

Eighteen percent of the interviewed clients claimed that they did not understand the purpose of Pap test and 3% could not understand the explanation given on referral care. Since it is recommended that screening should be done every five years, clients should gain good knowledge on all activities of cervical screening. The respondents also suggested improvements to the WWC services and a majority (54%) pointed out the importance of enhancing community awareness.

During the field interviews many deficiencies were found right throughout the follow up process of screened clients. Of the clients interviewed at home, only 48% had received the Pap smear report. Of these 28% had visited the WWC to collect the reports, while the rest had been handed over by the respective area PHMs to the clients during home visits. Thus, only a limited number of clients have had the opportunity to discuss the follow up procedure with the service provider in the WWCs i.e. DDHS. This may be a cause of poor compliance with correct practice.

Of those who had been referred to the gynaecology clinic, eight (16%) clients had not followed the instructions. Ignorance and inability to understand instructions given by the clinic staff were found to be the reasons for this lapse, indicating a communication gap between the clients and the service provider.

Only 50% of the clients were satisfied with the follow up visits of the PHMs. Of the interviewed clients, 17% were satisfied with the instructions given on follow up care by them, indicating the necessity of improving the knowledge of PHMs on correct follow up care.

A considerable number of clients, (17, 40%) had to visit the referral clinic more than once and 13 (31%) clients had to wait more than one hour before being seen by a medical officer in the referral clinic creating dissatisfaction among the clients. It highlights the necessity of orientation of referral clinic staff on the objectives of the National Cervical Screening Programme and to give WWC clients, some degree of priority during the clinic visits.

Recommendations

Increasing the frequency and number of clinics held could improve the coverage of care. It is also essential to conduct WWCs on separate days without combining with MCH/FP clinics. WWCs should be fully equipped in accordance with recommended guidelines. Follow up care has to be strengthened. All attempts should be made to reduce the mean duration of time between screening and the receipt of reports to less than one month as recommended by the WHO (10).

Supervising officers, e.g. Medical Officer Maternal and Child Health (MO/MCH), require to be trained on the guidelines issued and on monitoring and supervision to ensure and maintain the following: an adequate number of clinics; adequate number of staff; optimal resource distribution; practice of correct procedure and provision of quality care.

Secondary care institutional staff, such as referral clinic staff and relevant health managers have to be included in the periodical orientation programmes on cervical screening. Field staff especially public health midwives should be oriented for WWC activities.

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