Systematic review of patients' views on the quality of primary health care in sub-Saharan Africa

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Abstract

This is the first systematic review of patient views on the quality of primary health care services in sub-Saharan Africa using studies identified from MEDLINE, CINAHL Plus, EMBASE and PsycINFO. In total, 20 studies (3 qualitative, 3 mixed method and 14 quantitative) were included. Meta-analysis was done using quantitative findings from facility- and community-based studies of patient evaluation of primary health care. There was low use of validated measures, and the most common scales assessed were humanness (70%) and access (70%). While 66% (standard deviation = 21%) of respondents gave favourable feedback, there were discrepancies between surveys in community and facility contexts. Findings suggest that patient views could vary with subject recruitment site. We recommend improvement in the methods used to examine patient views on quality of primary health care.

Introduction

The use of patient views in the assessment and improvement of quality in health care is becoming increasingly important.[1] This is reportedly influenced by current emphasis on patient-centred health care,[2,3] increased public demand for accountability[4,5] and its practical and political utility.[6–8] Patient views have been used to measure overall quality of health care services, aspects of care and activities of health professionals.[9–11] Similarly, qualitative and quantitative studies of patient views have also been used to identify problems in care, explore their influences on adherence and health care utilisation and assess quality improvements in health care.[8,12–14]

Patients can express their views on health care as follows:

- *Preferences* – ideas about what should occur in health care systems in terms of expectations, needs and priorities;
- *Evaluations* – reactions following an encounter with the service;
- *Reports* – objective feedback following an encounter with the service.[15]

Primary health care is seen in most countries as the first level of contact of individuals and communities with countries' formal health system.[16] While comprehensive primary health care remains a core strategy for achieving the World Health Organization's goal of health for all, selective primary health care aimed at mitigating the most challenging health problems of the population is promoted in many countries in sub-Saharan Africa.[17–19] Current reforms

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under both forms of primary health care are aimed at re-organising services around patient needs and expectations.[20] These reforms require strong evidence base, and reviewing the current status of evidence would be beneficial to such on-going reforms in sub-Saharan Africa. Unlike the situation in developed countries, there is still limited evidence relating to patient view on primary health care in sub-Saharan Africa.[15,21–24] To our knowledge, there is also no published systematic review bringing findings from available studies together. We aimed to bridge this gap through synthesising evidence from available studies of patient views on the quality of primary health care in sub-Saharan Africa.

Review questions

The review had the following research questions:

- In which sub-Saharan countries have patient views on the quality of primary health care been studied?
- What methods were used?
- What categories of patient views were studied?
- What dimensions of primary health care were measured?
- How do patients in sub-Saharan Africa view primary health care?
- What are the implications of these findings?

What is already known of this topic?

1. Improvement of primary health care services should take into account the views of patients.
2. Although there is a significant evidence base in developed countries, the evidence base in developing countries is much smaller.

What this study adds?

1. Provides a summary of research on patient views on the quality of primary health care in sub-Saharan Africa.
2. Reported categories of patient views studied, quality scale measured and summarised findings from these studies.
3. Highlighted the research, practice and policy implications of review findings.

Methods

The conduct and reporting of this systematic review followed the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).[25]

Eligibility of the studies

Studies included in this review were selected using the following criteria:

1. Empirical studies using qualitative, quantitative or mixed methods.
2. Investigated patient views on primary health care or specific components of primary health care. Primary health care is regarded here as first contact, universal, equitable and affordable care commensurate with countries' developmental profiles.[16]
3. Conducted in any of the countries of sub-Saharan Africa.

We excluded studies that were conducted in hospital settings and those focused primarily on patient reports on their functional health status.

Search strategy

Articles were retrieved by searches from MEDLINE via OVID (1950 to Week 1 April 2014), CINAHL Plus via EBSCO portal (1937 to 10 April 2014), EMBASE via OVID (1974 to 18 April 2014) and PsycINFO via OVID (1806 to Week 3 April 2014). The systematic search of available studies from the various databases was aided by keywords extracted from the published literature[15,26] and filters from expert searches in MEDLINE and EMBASE. This was concluded on 30 April 2014.

Keywords were organised around four domains as provided by the CHIP framework – Context (primary health care), How (empirical studies), Issue of interest (patient views) and Population (patients in sub-Saharan Africa).[27] The detailed search strategy and results are provided in the Supplementary Material.

Results of the searches were imported into Endnote reference management software. Duplicates were automatically identified and removed before titles, and abstracts were inspected by D.O., and S.G. reviewed the titles and abstracts of a 10% sample of the pooled results to assess reliability of the screening process. From the output of the initial screening by the two independent reviewers, full articles were retrieved for detailed assessment against the eligibility criteria.

Appraisal of studies

Schemes appropriate for the different study methods were used to appraise the quality of the studies and assess the overall strength of the evidence base in order to guide synthesis:

- Quantitative studies were appraised with the Joanna Briggs Institute (JBI) critical appraisal checklist for descriptive/case series. Tool contains nine items, which consider the extent to which studies minimise

the occurrence of bias from selection, measurement and statistical analysis.[28] It considered sampling methods, eligibility criteria, confounders and comparison groups, measurement of outcome and methods of statistical analysis.

- Qualitative studies were appraised using the Critical Appraisal Skills Programme (CASP) for qualitative studies.[29] This has 10 items, which consider the clarity of the research aims, appropriateness of the methods, subject selection, data collection, data analysis and value of the study.

Data extraction and outcome measures

Structured data extraction forms were developed in line with the research questions. Data extracted included the countries where the study was done, nature of practice, year of publication, study method, study design, sample size, sampling method, recruitment site, measure validation status, measure specificity, nature of data analysis, the type of patient views studied, response rate as well quantitative findings from the studies. Available data on socio-demographic characteristics of study participants such as gender, age distribution, educational status, employment status and marital status of the participants were extracted. Reviewers ensured that data of interest were not duplicated in situations where more than one article was published with same data set.

Following extraction, data synthesis was conducted to provide answers to the various research questions using the methods described below.

In which sub-Saharan countries, have studies of patient views of primary health care been conducted? We present descriptive data on the countries where the studies were conducted.

What study methods were used? We present descriptive data on research methods (e.g. qualitative, quantitative, mixed methods) and samples. Methods of subject selection were coded as probability or non-probability depending on whether the sampling methodology gave every potential subject a fair chance of being included as participants in the study. We differentiated studies where participants were recruited from the community from those visiting primary health care facilities. We reported the validation status of measures used by noting whether the validity and reliability of these measures were previously determined.

What categories of patient views were studied? Patient views were coded as preferences, evaluations or reports as defined earlier[15] based on the predominant category studied.

What dimensions of primary health care were measured? We also coded scales measured using a scheme similar to a previous published review:[24]

(a) *Humanness*. This covers staff conduct, respect, courtesy, receptiveness and interpersonal skills.
(b) *Access*. This includes distance to the facility, opening times, availability of appropriate health workers, being able to reach the facility on the phone.
(c) *Bureaucratic arrangements*. This includes waiting times, promptness in receiving attention, operating times, service plan and the organisation's support for patients and staff.
(d) *Cost of care*.
(e) *Information and communication*. This includes counselling, information on illness, treatment and prevention, clarity of communication and information on planned services.
(f) *Physical facilities*. This includes nature of the building, amenities, adequacy of equipment for patient care, patient records, laboratory and infrastructure for emergencies.
(g) *Adequacy of supplies* such as drugs and other commodities.
(h) *Technical performance*. This includes the skill and competence of providers, safety and quality assurance, perceived quality of consultations, follow up and continuity of care.
(i) *Outcome*. This includes perceived benefits from encounter with the service.
(j) *Psychosocial aspects of care*. This category includes responsiveness, interest in clients, staff willingness to help, personal attention, protection of clients' rights, dignity, privacy, confidentiality and patient involvement.
(k) *Overall view of service*. This includes overall satisfaction with the service.
(l) *Patient willingness to return* to same facility when the need arose.
(m) *Patient willingness to recommend* the facility to friends and relatives if they need similar care.

How do patients in sub-Saharan Africa view primary health care? Data extracted from studies were categorised under preference, evaluation and reports. Studies report quantitative data on patient views as scale scores or categorical responses (i.e. proportions of respondents using various categories of responses). Pooling of quantitative findings from studies was done only for studies on patient evaluation of entire or aspects of primary health care. We handled scale scores and categorical responses differently even where both appeared in the same study.

Patient rating on scales was transformed to percentages by the following formula: (patient score − minimum scale score)/(maximum scale score − minimum scale score) × 100,[23,30] to allow for comparison among similar studies.

Categorical responses showing proportions of respondents endorsing various response options were either with dichotomous options (e.g. 'yes' or 'no') or a grade of responses that were unipolar, bipolar or non-structured (e.g. proportion of respondents reporting being 'very satisfied', 'satisfied', 'not

satisfied'). Researchers used an approach similar to a previous review[23] by identifying a threshold that appropriately dichotomises such graded responses as 'favourable' or 'not favourable' and then calculating the proportion of patients giving favourable responses. In above example, this threshold lied between satisfied and not satisfied.

Where studies measured any of the coded scale using more than one item, these were extracted and the standardised scale score calculated. This approach provided the average score for each of the scale studied in a particular study in terms of the mean scale scores or the mean proportion of respondents providing favourable response on that scale. This information was subsequently used to provide summary statistics (mean, median, standard deviation (SD) of range of scale results) for individual studies stratified by the response pattern (continuous, categorical). We went further to pool findings from all quantitative evaluative studies and also attempted to demonstrate if finding was affected by site of subject recruitment (community-based versus visitors to health centres). This approach is illustrated with an example below.

Calculating the summary statistics from individual studies. In a particular study, with 5-point Likert-type response scale (1–5), a total of 140, 125 and 155 respondents rated staff conduct, receptiveness and interpersonal skills with mean ratings of 3.4, 2.9 and 2.7, respectively. The average score for each item was first converted to percentages. This gave mean percentage scores of 60, 47.5 and 42.5, respectively. Combining all three items under the humanness scale required calculating a weighted average of their rating

$$\text{Study's score for humanness} = \frac{\begin{bmatrix} (140 \times 60) \\ + (125 \times 47.5) \\ + (155 \times 42.5) \end{bmatrix}}{140 + 125 + 155}$$

Results

The overview of included studies is presented in Table 1, and the PRISMA flow diagram in Figure 1 shows the study selection process.

In which sub-Saharan countries have studies of patient views on primary health care been conducted?

Table 1 also shows that half of the studies were conducted in South Africa, while the rest were conducted in Nigeria (n=6), Guinea (n=1), Burkina Faso (n=1), Uganda (n=1) and Zambia (n=1).

What study methods were used?

Participants were recruited from primary health care facilities in 75% of studies (Table 1). The sample sizes of the

quantitative studies ranged from 50 to 1210 with a mean number of participants being 372 and median 564 (Table 2). Where reported, the response rate for the quantitative studies ranged from 94.8% to 100% with a mean of 97.4%. Only one study gave an analysis of non-responders. Some studies provided additional information such as examining trends in patient views over time, comparing two primary health care institutions, comparing more than two health centres, or determining gaps between expectation and perception or between patients with different conditions. The reliability and validity of the measures used were reported in 25% of studies (Table 2).

What categories of patient views were studied?

The majority of studies (70%, n=14) explored evaluations of the service, while 20% were reports and the rest studied preference (Table 1). The dimensions of primary health care measured in the individual studies is presented in Table 1. The most frequently measured dimensions were humanness (70%) and access (70%).

How do patients in sub-Saharan Africa view primary health care?

The result of the meta-analysis presented in Table 3 reveals mean scale evaluation score of 62 out of 100 (range 42–87) with 66% of the categorical responses reclassified as signifying positive responses (range 22–98). Relatively, more participants from the facility-based surveys gave favourable feedback than those recruited within the community (67% vs 57%). The effect of recruitment site (0.47, 95% confidence interval (CI: -0.92, 1.77) on subjects' feedback on primary health care was not statistically significant.

Discussion

Summary of the review

This is the first systematic review of empirical studies of patient views on the quality of primary health care in sub-Saharan Africa. We noticed a steady increase in research on patient views from the earliest published work in 1985, and hence 20 studies were identified through the systematic search. Existing studies were from 6 out of the 49 countries in sub-Saharan Africa. There were no experimental studies, and many did not use measures with proven reliability and validity.

Comparison with other studies

Our findings that most studies were patient evaluations of primary health care is similar to findings in another review.[6] That most evaluation studies are patient satisfaction surveys may be anchored on the contentious notion of a potential link between patient satisfaction and receipt of quality care.[6,23]

Table 1. Methodological and content-specific characteristics of studies (N=20).

	Methodological characteristics						Findings			
Author/year	Country of study	Practice specificity	Measure of patient view	Measure validation	Comparison group	Sample size, method, recruitment site	Patients' characteristics and response rate	Response format	Scale	Range of results
Quantitative studies										
Wouters et al.[31]	South Africa	PHC component	Evaluation	Yes	Yes	975, stratified random, facility	All ≥18years, female 68.1%, unemployed 83.6%	Rating scale	a, h, l	Mn=79.9, SD=11.1, Md=84.5, range=63.5–87.3
Oladapo and Osiberu[32]	Nigeria	PHC component	Evaluation	No	No	452, systematic sample, facility	All females, uneducated 5.1%, unemployed 19%, married 90.7%, 98% response	Proportion	b, c, k, l	Reported predictors
Abiodun[33]	Nigeria	Entire PHC	Evaluation	No	Yes	183, purposive sample, facility	All ≥18years, female 60.1%, uneducated 20.2%	Rating scale	a, b, f, h, i, l, m	Mn=56.8, SD=3.0, Md=57.8, range=52.8–60.5
Thomson and Myrdal[34]	South Africa	Entire PHC	Evaluation	No	Yes	100, convenience sample, facility	Female 70%, uneducated 13%	Report	b, c, d, i	
Yé et al.[35]	Burkina Faso	Entire PHC	Evaluation	Yes	No	1081, sampling procedure? facility	Female 57%, uneducated 82%, response rate 96%	Rating scale	a, b, d, i	Mn=64.6, SD=10.3, Md=62.1, range=51.9–76.8
Peltzer[36]	South Africa	Entire PHC	Evaluation	Yes	No	174, multistage cluster, community	All ≥18years, female 51%, unemployed 72%, married 40%	Proportion	b, d	Mn=29.0, SD=6.3, Md=31.0, range=22.0–34.0
Oladapo et al.[37]	Nigeria	PHC component	Evaluation	No	No	427, convenience, facility	All female, uneducated 5.1%, previous visit to facility 21.7%, 98% response	Proportion	b, c, d, e, f, g, h, i, j, l	Mn=73.3, SD=20.5, Md=74.3, range=29.0–96.7
Chimbindi et al.[38]	South Africa	PHC component	Evaluation	?	Yes	600, multistage, facility	All ≥18years, female 57%, uneducated 17.5%, unemployed 89.5%, married 18%	Proportion	a, c, f, l, m	Mn=79.1, SD=21.1, Md=87.0, range=52.5–98.0
Udonwa et al.[39]	Nigeria	PHC component	Evaluation	No	No	425, systematic, facility	Female 88.3%, uneducated 15.2%, unemployed 16.7%, response rate 94.8%	Proportion	a, b, c, e, h, m	Mn=57.8, SD=15.5, Md=56.5, range=39.1–81.5
Ogaji and Etokidem[40]	Nigeria	Entire PHC	Evaluation/preference	Yes	Yes	68, convenience, facility	All ≥18years, female 55.9%, married 71.2%, response rate 100%	Rating scale/proportion	a, b, f, h, i, j, k, l, m	(Scale)–Mn=61.7, SD=18.2, Md=60.4, range=37.8–88.3

(Continued)

Table 1. (Continued)

Author/year	Country of study	Practice specificity	Measure of patient view	Measure validation	Comparison group	Sample size, method, recruitment site	Patients' characteristics and response rate	Response format	Scale	Range of results
Kyaddondo et al.[41]	Uganda	PHC component	Evaluation	No	No	395, cluster, community	Female 64.8%, uneducated 58%, unemployed 65.1%	Proportion	e, m	Mn=82.4, SD=16.4, Md=82.4, range 70.8–94.0
Mayeye et al.[42]	South Africa	PHC component	Evaluation	No	No	200, sampling? facility	Aged 16–19years, female 98%, married 6%	Proportion	a, b, d, e, f, k, m	Mn=74.2, SD=12.3, Md=80.0, range=49.0–85.0
Bediako et al.[43]	South Africa	Entire PHC	Evaluation	No	No	567, convenience, facility	All ≥18years, female 76.7%, previous visit to facility 79.3%	Proportion	a, b, c, d, e, g, h, m	Mn=51.1, SD=15.3, Md=55.6, range=24.5–69.0
MacKeith et al.[44]	Zambia	PHC component	Evaluation	No	No	1210, multistage, systematic, community	All females, uneducated 5%	Proportion	a, b, d, l	Mn=84.0, SD=7.1, Md=84.0, range=79.0–89.0
Mixed methods studies										
MCur[45]	South Africa	PHC component	Report/preference	?	Yes	50, convenience, facility	All females, aged 15–49years	Rating scale	a, b, e, h, m	
Richter and Mfolo[46]	South Africa	Entire PHC	Preference/report	Yes	No	119, convenience, facility	Aged 14–19years, female 83%	Proportion/report	b, d, m	Mn=62.5, SD=51.6, Md=62.5, range=26.0–99.0
Ehiri et al.[47]	Nigeria	PHC component	Report/evaluation	?	No	76, sampling? facility	All mothers	Report/proportion	a, c, f, g	Mn prop (b)=72.0, average time spent at facility=1 hour
Qualitative studies										
Sokhela et al.[48]	South Africa	Entire PHC	Report	?	No	83, sampling? facility		Report	a, b, d, h, l, m	
Mashego and Peltzer[49]	South Africa	Entire PHC	Report	?	No	74, sampling? community	Female 55.3%	Report	a, c, d, f, g, h, l, l, m	
Haddad et al.[50]	Guinea	Entire PHC	Preference/report	?	No	180, sampling? community		Report	a, b, c, e, f, g, h, i	

Mn: mean; SD: standard deviation; Md: median; PHC: primary health care; a: humanness; b: access; c: bureaucratic arrangement; d: cost; e: information and communication; f: physical facilities; g: adequacy of supplies; h: technical performance; i: outcome; j: likelihood of return; k: recommendation to other; l: Overall satisfaction; m: psychosocial aspect of care; ?: not clear.
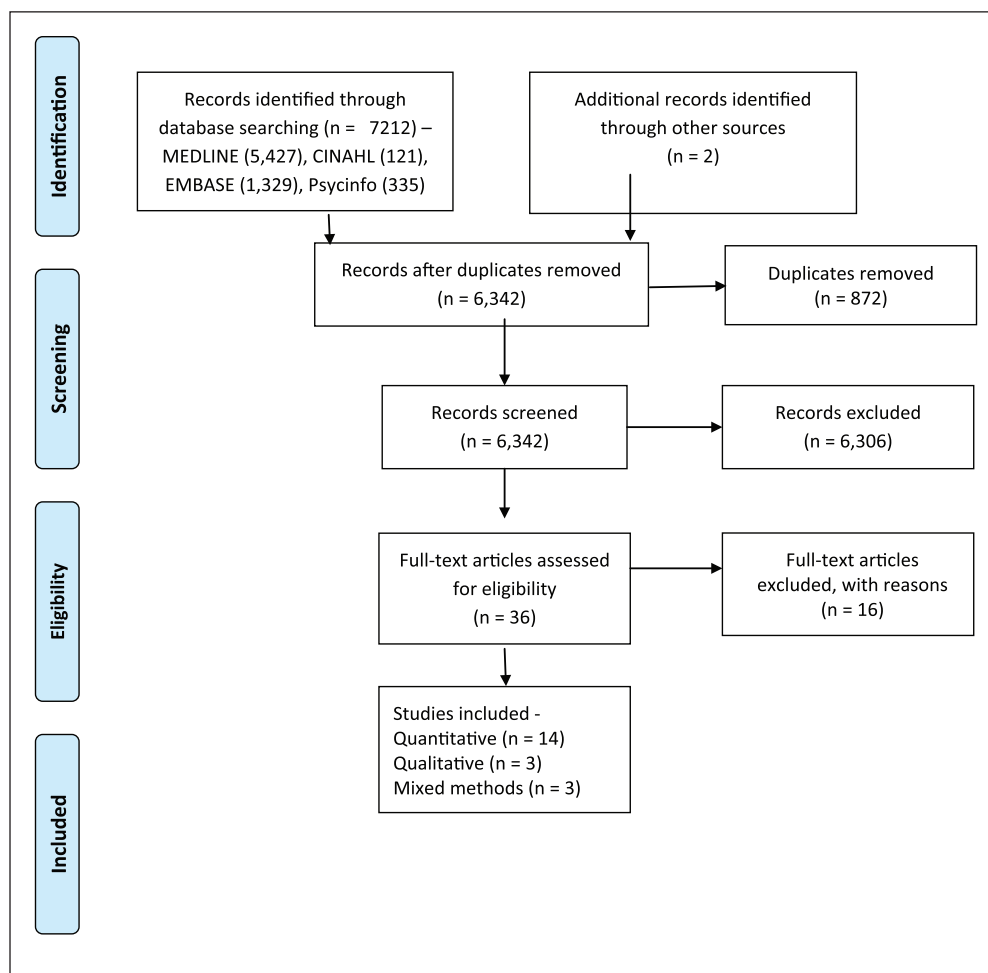
Figure 1. PRISMA flow chart of study selection process.[32]

Table 2. Measure characteristics (N = 20).

Variable	Distribution
Measure validation	Yes = 5 (25%)
Sample size	Total = 7439, mean = 372, median = 564, range = 50–1210
No. of scales measured	Mean = 5.5, SD = 2.6, median = 5, mode = 4, range 2–11
Content	Humanness = 14 (70%)
	Access = 14 (70%)
	Psychosocial aspect of care = 12 (60%)
	Technical performance = 11 (55%)
	Bureaucratic arrangement = 10 (50%)
	Cost = 10 (50%)
	Outcome = 9 (45%)
	Physical facility = 8 (40%)
	Information/communication = 7 (35%)
	Overall satisfaction = 7 (35%)
	Adequacy of supplies = 4 (20%)
	Recommendation to others = 3 (15%)
	Likelihood of return = 2 (10%)

SD: standard deviation.

Table 3. Quantitative findings from patients' evaluation of primary health care.

Variable	N	Distribution
Quantitative feedback		
Scale	5	Mean = 62.2, SD = 12.9, median = 59.2, range = 41.5–87.3
Proportion	11	Mean = 65.5, SD = 21.3, median = 63.5, range = 22.0–98.0
Subject recruitment site		
Health facility		
Scale	4	Mean = 62.2, SD = 12.9, median = 59.3, range = 41.5–87.3
Proportion	8	Mean = 66.5, SD = 19.9, median = 68.4, range = 24.5–98.0
Community survey		
Proportion	3	Mean = 56.8, SD = 31.7, median = 52.4, range = 32.0–94.0

SD: standard deviation; N: number of studies.
One of the studies used both scale and proportion.

Even if not considered prominent enough by some researchers, patient reports may provide more accurate assessments of patient views for quality improvement than preferences and evaluations.[15]

Our findings also indicate that there are more quantitative than qualitative studies on the subject. The availability of various theoretical approaches to measuring patient views,[51,52] provide potential advantages in the use of a triangulation of methods. This could compensate for inherent weaknesses in the different methods and also have the potential to improve accuracy, validity and relevance of the findings.[15,51,53]

Reported response rates of studies in this review were found to be very high (mean = 97.4%, range = 94.8–100.0). In fact, much higher than what is usually reported in survey research in other practice settings.[54] This could be reflective of participants' interest on the subject which may propel them to take the extra effort at responding to the measure. Also, the mode of administering the measure could also influence the response rates.[55] Constraints posed by low level of literacy and use of technology in most parts of sub-Saharan Africa make direct administration of survey instrument to potential respondent the likely option unlike the use of post, emails or web forms of adminstration which are prevalent methods used in survey research in more developed settings. Direct mode of administering survey instrument may exert subtle urge on patients to participate and return completed questionnaire to the administrator who usually are stationed within recruitment sites.

The low utilisation of validated measures has important implications for the strength of the evidence from this review.[15,52] This low frequency of use of validated measure may be due to the dearth of such measures developed for use in this setting. There are also concerns with wholesome transfer of measures that were developed or validated in other settings. These concerns range from faulty translations, irrelevant contents, lack of semantic equivalence, different social characteristics among various groups or the nature of the responses required. This provides a rationale for the development of appropriate measures or adaptation of previously validated measures to suit local context.[56–58]

The frequency with which quality scales in this review showed some departure from findings from a previous review with a global scope involving the broader medical care system.[23] While measurement of humanness was prevalent in both reviews, access to care ranked much lower in the other review. Besides the contribution of socio-cultural, practice settings and patient priorities which differ with time and location,[59–61] these data suggest that access to primary health care is a prominent issue in sub-Saharan Africa.

Meta-analysis of the findings from studies of patient evaluation of primary health care across this region gave a mean score of 62% and for studies with categorical response, 66% of respondents gave favourable feedback on the quality of primary health care. Such findings need to be interpreted with caution as a number of factors could affect patients' responses either by inhibiting a negative evaluation or by promoting a positive one.[59,62] In addition, the meta-analysis of outcomes from diverse studies may hide very significant variations in the various practice and cultural settings. The findings reported here were however lower than what was reported in an earlier review which reported a mean scale score of 76% and a mean proportion of 81% of patients satisfied with their medical care.[23] This difference suggests that patients in sub-Saharan Africa express less satisfactory feedback on the quality of health care they receive when compared with the global patients' views.

One advantage of quantifying the results from diverse studies on a comparable metric is that it does allow some sources of variation to be explored in detail. In both the current and previously reported analysis,[23] facility-based studies reported higher average proportion of respondents providing favourable feedback than community-based surveys. This may indicate that patients give more favourable responses about their health care if they are requested to do so while on a visit to the health facilities than when they are recruited from the community. The latter may provide a more appropriate evaluation on the health facility. Beside recruitment site, the methods of patient selection and administration of the measure may also influence patient responses.[55,61,63] That the difference was not significant in this review unlike the

previous review[23] may be due to the small sample of studies available for this review.

Strengths and limitations

This review derived strength from the comprehensive search strategy adopted for identification of included studies and application of a robust method of evidence synthesis. Limitations could arise if other researches on the subject in sub-Saharan Africa are either unpublished or published in non-indexed journals.

The strength of the body of evidence presented is limited by inherent weaknesses in the methods, measurement process and measurement tools of the individual studies included in the review. The absence of experimental or analytic studies meantfindings were largely from descriptive studies. We recognise the difficulties in interpreting findings from such studies where controls or comparison groups were not established a priori.

We pooled quantitative data from studies reporting patient evaluations, but this was not possible with studies of preferences or reports due to insufficient data. As well as concerns discussed above about the applicability of meta-analysis in data from varied contexts, the method we adopted by categorising responses into crude dichotomous categories would have resulted in a loss of information from studies which reported more detailed categories. However, the focus of the meta-analysis was on pooling data from multiple studies to assess overall levels of satisfaction, and the loss of information was considered acceptable in order to ensure the studies were comparable.

Implications of the review for research

The review identified published studies from only 6 of the 49 countries in the sub-Saharan Africa. This situation may highlight the need to strengthen capacity for research in the region. Furthermore, there are implications concerning the infrequent use of valid and reliable measures in assessing patient views as highlighted in this review. This would require appropriate research into the development of new measures or validation of previous measures developed elsewhere for use in this region.

Correlational researches which compare findings from self-reports with those from more objective or direct measures of quality are needed to determine the validity of self-reported measures in this practice setting. Future research on patient views needs should address deficiencies in the methods that have been used so far. Similarly, experimental designs to test factors associated with findings from patients reported outcomes would be optimal, although may be very expensive.

Finally, future research should aim to develop locally relevant and reliable criteria and standards that would serve as benchmarks to compare performance in relation to patient views and to identify quality gaps.

Implications for clinical practice

Frequently used scales for measuring the quality of primary health care in this setting were identified. These scales will be useful in supporting understanding of patient experience and the effects of quality improvement activities in sub-Saharan Africa.

There is also need to involve stakeholders including patients and the public in setting priorities for primary health care which may vary over time and settings. Periodic research on patient views should then form a basis for continuous quality improvement in clinical practice.

Policy implications

Despite the burgeoning nature of research on patient views on the quality of primary health care, it remains a surprise that many countries in sub-Saharan Africa had no published reports on this subject. Policies that would provide incentives for local researchers to undertake research related to patient views should be encouraged. Utilisation of research findings by decision makers can also serve as catalyst for promoting further research on patient views.

An additional policy implication from this review is the need to promote large-scale use of patient reported outcomes for continuous quality improvement in primary health care. In this regard, sub-national and national governments within the region would need to develop policy framework for routine investigation of patient views and a mechanism for utilising findings in the design and re-organisation of primary health care to meet the needs and expectations of patients.

Equally useful would be support for ensuring that stakeholders adhere to relevant local standards guiding interpretation and use of the findings from patient views on primary health care.

Conclusion

Our review shows that research on patient views on the quality of primary health care in sub-Saharan Africa is a developing area. We recommend that future research should address the identified methodological flaws related to the design, measurement tool and selection of participants. There is also a need to research appropriate models of integrating findings from such studies into effective frameworks for quality improvement.

Declaration of Conflicting Interests

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