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Comparison of health service accreditation programs in low- and middle-income countries with those in higher income countries: a cross-sectional study

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Abstract

Objective. The study aim was twofold: to investigate and describe the organizational attributes of accreditation programmes in low- and middle-income countries (LMICs) to determine how or to what extent these differ from those in higher-income countries (HICs) and to identify contextual factors that sustain or are barriers to their survival.

Design. Web-based questionnaire survey.

Participants. National healthcare accreditation providers and those offering international services. In total, 44 accreditation agencies completed the survey.

Main outcome measure(s). Income distinctions, accreditation programme features, organizational attributes and cross-national divergence.

Results. Accreditation programmes of LMICs exhibit similar characteristics to those of HICs. The consistent model of accreditation worldwide, centres on promoting improvements, applying standards and providing feedback. Where they do differ, the divergence is over specialized features rather than the general logic. LMICs were less likely than HICs to include an evaluation component to programmes, more likely to have certification processes for trainee surveyors and more likely to make decisions on the accreditation status based on a formulaic, mathematically oriented approach. Accreditation programme sustainability, irrespective of country characteristics, is influenced by ongoing policy support from government, a sufficient large healthcare market size, stable programme funding, diverse incentives to encourage participation in accreditation by Health Care Organizations as well as the continual refinement and improvement in accreditation agency operations and programme delivery.

Conclusions. Understanding the similarities, differences and factors that sustain accreditation programmes in LMICs, and HICs, can be applied to benefit programmes around the world. A flourishing accreditation programme is one element of the institutional basis for high-quality health care.

Keywords: low- and middle-income countries, higher income countries, accreditation, healthcare standards, political circumstances

Introduction

The World Bank classifies countries into low- and middle-income and higher income groups based on their levels of income per capita [1]. Low- and middle- income countries (LMICs) face many challenges compared with higher income countries (HICs) in providing quality health care to their citizens. An investigation into patient safety in developing and transitional countries estimated an 83% preventable error rate and 30% of adverse events associated with deaths [2], much

higher than the estimates in developed countries. Aside from more resources, to improve the safety and quality of care, LMICs require political environments with sufficient capacity and focus to sustain institutions, structures and services in support of heathcare provision; mechanisms and infrastructure for quality and patient safety initiatives; and policies and procedures by which to embrace improvement strategies [3]. One gateway to appreciate the challenge of embracing these requirements is to examine the institutional basis for the provision of high-quality care in LMICs. A key institutional driver is a flourishing healthcare accreditation programme [4–6]. The prevailing logic for such programmes is well known: establishing systems that determine and apply organizational and clinical standards; assessing the extent of provider compliance with these standards; and encouraging continuous improvement as performance changes or requirements are raised over time [7, 8]. Healthcare accreditation organizations serve health systems by stimulating and enabling the translation of healthcare quality and safety standards into practice [9, 10].

The evidence supports the hypothesis that, with comparatively fewer resources and less-stable political environments, it is harder for LMICs to sustain the structures and institutions needed for a thriving accreditation capability [11]. A high number of accreditation programmes have failed in resource-poor country settings [11]. The barriers to successful and sustainable accreditation programme implementation are significant, and can be classified into external or internal factors. External factors include changes in government, a lack of legal standing or premature end to core funding by international donors. Internal factors include a range of issues such as operational (for example, capacity limitations, logistical difficulties and scheduling management); management systems (for example, implementation costs and inefficient processes); programme management (for example, information and data management, and surveyor workforce recruitment); and stakeholder management (for example, engagement, communication and incentives) [12–16]. Strategies used to facilitate effective accreditation programmes in LMICs can also be classified into external and internal factors. External factors include having dedicated programme funds and government or donor commitment, or preferably both. Internal factors are operational (for example, having a functioning accreditation agency); management systems (for example, leadership support, continual refinement of programmes and adequate branding of the accreditation programme and body) and stakeholder management (for example, ongoing engagement with stakeholders, provision of ongoing technical assistance to health services and use of clinician surveyors) [12–17]. In a study into the sustainability of accreditation programmes in Europe, four important elements in accreditation services were identified: having a sufficiently large healthcare market; consistency of policy support; programme funding and financial incentives for participation [18]. This raises an interesting question: are there universal factors that influence the sustainability of an accreditation programme, regardless of income or country variability?

There is evidence that accreditation programmes globally have evolved to adopt a common model [6, 9, 19], and this has further spread across LMICs and HICs [18]. This has been supported by a number of proponents including the International Society for Quality in Health Care (ISQua) (through its International Accreditation Program (IAP)) [20], the World Health Organization [21] and donor agencies [18]. Regardless of the significant challenges and barriers faced in initiating and sustaining health service accreditation programmes in LMICs, advocates see value and utility in supporting them [11]. However, the support is based on belief rather than a solid evidence base. Empirical research comparing accreditation programmes globally is rare. Further investigations would reveal the comparability of programmes, operational aspects and contextual factors that sustain or are barriers to their survival [18]. Underlining these issues, there is limited understanding and evidence about policies and programmes, including accreditation programmes, that can improve quality in LMICs [22]. This study is one response to the call for research to address these knowledge gaps.

The study aim was twofold: to investigate and describe the organizational attributes of accreditation programmes in LMICs to determine how or to what extent these differ from those in HICs and to identify contextual factors that sustain or are barriers to their survival. Understanding the similarities and differences between accreditation programmes in LMICs and HICs can be beneficial for both groups in understanding how to run successful programmes with limited resources such as in LMIC and what, if anything, additional resources might purchase in HICs. Additionally, the activity contributes to developing the evidence base for improving quality systems and clinical care processes in LMICs.

Methods

Study design and participants

We drew on a questionnaire survey of international healthcare accreditation issues conducted between 2009 and 2011. The overarching aim of the broader study was 'to bring our knowledge of global developments [regarding accreditation programmes] up to date' [23]. This study was conducted by an international team, led by the second listed author, with expertise in accreditation and coordinated by ISQua [23], administering a survey modified from one previously conducted in 1999 [21]. The team updated the previous survey, informed by other European surveys on accreditation programmes [18, 24, 25]. The questionnaire comprised 10 categories: covering: policy settings; programme governance; development; funding; training and facilitation; report management; scope of services; and activities in hospital and primary care. Across the 10 issues, there were 165 questions requiring numerical (including date), categorical or text responses [23].

The inclusion criteria for the study was healthcare accreditation programmes that offered external assessment against published standards, formally recognized institutional compliance with those standards and were available nationwide or internationally to healthcare provider institutions or

networks at primary, secondary or tertiary level. We excluded specialized, regional or non-health programmes. The research team used a non-probability consecutive sampling strategy with snowball sampling to identify and recruit participants [26]. Surveyed accreditation programmes met the study criteria and agreed to participate. Participants from previous surveys, the ISQua IAP and personal contacts were targeted. An electronic invitation to participate was sent to 61 organizations from which 44 agreed to take part. There are reports in the literature indicating that there are between 70 and 80 nation-wide or international healthcare accreditation programmes worldwide [8, 19] and an unknown additional number of regional or niche programmes.

Analysis

Analysis strategies provided a descriptive and explanatory examination of the data. Content analysis [27] was used to identify and develop an understanding of commonalities between programmes. Responses were collated into a single Excel table enabling visual examination of the programme characteristics. Informed by issues identified in the literature review, the table was systematically examined to identify patterns or trends in the responses across the programmes [27].

The 165 survey questions contained 50 categorical response-type questions, of which 38 were relevant for all organizations. This sub-group of questions each had two to eight response options, leading to 148 binary organizational attributes either possessed or not possessed by an accrediting organization. The sample size necessitated the use of different statistical approaches to identify similarities and dissimilarities between programmes in LMICs and HICs.

To highlight dissimilarities, we applied exact conditional two-sided tests [28] to 38 eligible questions arranged into contingency tables with mutually exclusive categories. This approach aimed to detect associations between organizational characteristics identified by the questions and the LMIC–HIC status of organizations. Non-probabilistic sampling, small sample sizes and multiple testing issues prevented us from conducting inferential-type analysis. Therefore, we used *P*-values to identify the patterns of association rather than make strict inferences. In particular, *P*-values ≤ 0.05 have been treated as suggestive, with the corresponding organizational characteristics warranting further investigation and interpretation.

To identify similarities, we examined differences between proportions describing attributes possessed by organizations across the LMIC and HIC groups. The method for detecting dissimilarities introduced above does not directly extend to testing for equivalence of organizational characteristics. This is due to negligible statistical power of equivalence tests applied to small samples [29]. To identify dissimilarities, we constructed a measure based on the following equation:

$$p_i = \frac{x_{i,\mathrm{LMIC}}}{n_{i,\mathrm{LMIC}}} - \frac{x_{i,\mathrm{HIC}}}{n_{i,\mathrm{HIC}}} = p_{i,\mathrm{LMIC}} - P_{i,\mathrm{HIC}}$$

where p_i is the difference between proportions of organizations possessing the attribute i, $x_{i,\mathrm{LMIC}}$ and $x_{i,\mathrm{HIC}}$ are the counts of organizations possessing the attribute i and $n_{i,\mathrm{LMIC}}$ and $n_{i,\mathrm{HIC}}$ are the numbers of organizations responding to the underlying question for LMICs and HICs, respectively. p_i can take values in the range from -1 to 1. Out of 148 organizational attributes covered by 38 questions, some pairs of attributes are mutually exclusive, for example, 'trainees are either certified or not certified', and only one such attributes should be retained. This leads to 136 attributes of interest to be analysed.

We consider an organizational attribute as contributing to evidence of similarity between programmes in LMICs and HICs if the difference in response proportions between LMICs and HICs organizations did not exceed 5% in either direction ($-0.05 \leq p_i \leq 0.05$) and the attribute is possessed by at least 25% of organizations in both LMIC and HIC groups ($p_{i,\mathrm{HIC}} \geq 0.25$ and pi, $_{\mathrm{LMIC}} \geq 0.25$). To identify attributes with the most discordant responses, an attribute was counted as indicative of dissimilarity if the difference in positive response proportions between LMIC and HIC organizations exceeded 25% in either direction ($p_i \leq -0.25$ or $p_i \geq 0.25$). The rest of the outcomes, $-0.25 < p_i < -0.05$ and $0.05 < p_i < 0.25$, are treated as uninformative individually, but indicate the tendency towards similarity when viewed jointly with respect to the entire range of the measure: $-1 \leq p_i \leq 1$.

Results

To separate the LMIC and HIC samples, we stratified them according to the World Bank income classification [1]. Three informative characteristics are presented: gross-national income (GNI) per capita [30]; population served by the programme; and programme connection or separation from government (Table 1). In summary, the 44 healthcare accreditation programmes in 38 countries represent a combined population of over 2.7 billion people, or about 39% of the world's population, and are divided into 20 LMICs and 24 HICs.

Accreditation agencies in LMIC and HIC countries subscribe to a programme model with common features. They develop or adopt a set of healthcare standards; enroll members who self-assess against those standards; recruit, educate and manage a workforce of industry surveyors; send out teams of surveyors to Health Care Organizations (HCO) to assess progress against the standards; evaluate the survey team report; and, where earned, award accreditation status for a period of three to five years. LMIC programmes displayed similarities in three characteristics: government or donors, or both, provided funds to 16 (of 20) LMIC programmes; a majority of LMIC programmes, 18 of 20, (and 21 of 24 in HICs), reported using multiple incentives to encourage participation in accreditation by HCOs; and 15 (of 20) LMIC programmes reported only covering a small number of HCOs, indicating significant potential capacity for growth.

For the majority of organizational attributes, there were no substantial differences observed between LMIC and HIC accreditation programmes, although there were variations in

Table 1 Characteristics of respondent accreditation organizations

Respondent accreditation programme by country	GNI per capita ($US, 2010)	Population (million, 2010)	Government relatedness*
Kyrgyzstan	840	5.42	G
India	1260	1194.35	M
Mongolia	1870	2.79	G
Philippines	2060	94.01	G
Albania	3970	3.20	G
Jordan	4140	6.47	M
Thailand	4150	67.07	G
Bosnia Herzegovina (AAQI)	4740	3.84	G
Bosnia Herzegovina (AKAZ)	4740	3.84	M
Colombia	5520	45.85	M
Serbia	5630	9.86	G
South Africa	6090	49.99	A
Bulgaria	6320	7.53	G
Kazakhstan	7500	16.43	G
Malaysia	7760	27.57	A
Romania	7850	21.47	G
Argentina	8620	40.09	A
Lebanon	8750	4.26	G
Brazil	9540	190.73	A
Lithuania	11 620	3.25	G
Poland	12 450	38.09	G
Croatia	13 870	4.44	M
Saudi Arabia	16 610	27.14	M
Czech Republic	17 890	10.52	A
South Korea	19 720	48.50	M
Portugal	21 830	10.64	G
Taiwan	27 122	23.16	M
New Zealand (HDANZ)	29 350	4.40	A
New Zealand (Telarc)	29 350	4.40	A
Spain	31 460	46.15	A
England	38 140	61.79	A
Japan	42 050	127.37	M
France	42 190	65.82	M
Germany	42 970	81.80	A
Canada	43 250	34.36	A
Australia (ACHS)	46 200	22.57	M
Australia (AGPAL)	46 200	22.57	A
Australia (QIC)	46 200	22.57	A
USA (DNVHC)	47 350	312.10	A
USA (JCI)	47 350	312.10	A
USA (Joint Commission)	47 350	312.10	A
Netherlands	48 920	16.65	A
Denmark	59 410	5.56	M
Switzerland	71 590	7.78	A

Shaded, LMICs (USD ≤12 275); unshaded, HICs (USD >12 275).
*G = Government: managed within Ministry of Health or a separate government agency; M = Mixed: independent agency with government representation or funding; A = autonomous: autonomous of government.

respective response patterns. LMIC accreditation programmes had five organizational characteristics notably different to those of HICs ($P < 0.05$). We present these graphically and discuss them below (Table 2).

Figure 1 displays the bar plot for sorted values of p_i and Table 3 summaries the results for identified concordant and discordant attributes. It can be seen from Fig. 1, the majority of attributes (128 or 94%) have fallen within the region

(−0.25, 0.25), indicating a degree of similarity between LMIC and HIC accreditation programmes. Of these, one-third of attributes (44 or 34%) are possessed by a majority of organizations within the narrower region (−0.05, 0.05), further indicating the conformity between programmes irrespective of the income status. The cut-off value of 5% for the concordance region shown in Fig. 1 has been chosen as the maximum change in p_i when including a single organization from either an LMIC or HIC group: max(1/24, 1/20) = 0.05). Only 10 attributes correspond to at least a quarter of programmes in LMIC and HIC groups and should be treated as evident of concordance (Table 3).

The attributes indicated as discordant in Fig. 1 are largely consistent with evidence adduced by more formal statistical testing. The attributes identify specific points of dissimilarities between LMIC and HIC programmes corresponding to broader characteristics: related to government; legal status; programme evaluation; certification of trainees; and use of mathematical scoring for deciding accreditation awards. We summarize the responses to these five issues and illustrate each graphically.

How is the organization/programme related to government? (POL1)

LMIC accreditation programmes are more likely to be funded by, or be under the auspices of, government, and HIC programmes tend to be independent ($P = 0.001$).

Table 2 Organizational characteristics exhibiting suggestive associations with the LMIC–HIC factor

Question	$c \times r$ table	*P*-value	Missing
How is the organization/programme related to government? (POL1)	2 × 3	0.001	0
What is the legal status of the accreditation organization? (POL3)	2 × 3	0.005	0
Are healthcare organizations formally requested to evaluate the organization/programme? (REP10)	2 × 2	0.030	1
Are successful trainees formally certificated? (TRA5)	2 × 2	0.037	2
Are mathematical scoring or algorithms used to decide accreditation awards? (REP1)	2 × 4	0.039	1

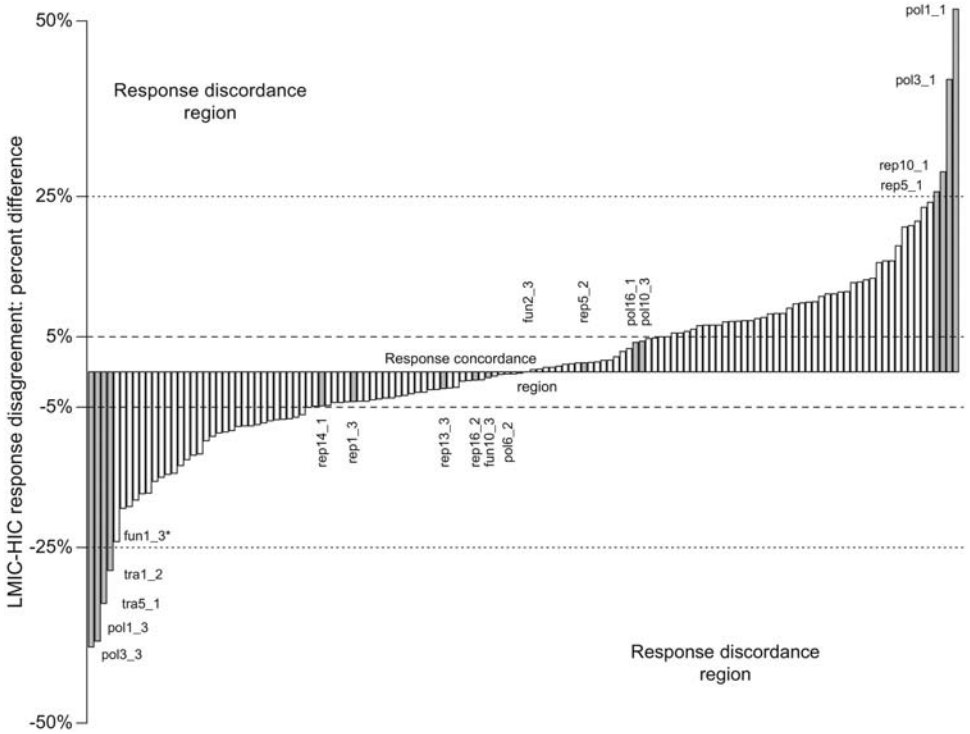

Figure 1 Sorted differences in proportions of response attributes: $p_i = p_{i,\mathrm{HIC}} - p_{i,\mathrm{LMIC}}$. * fun1_3 is outside the response discordance region, but is displayed to emphasize that the choice of 25% cut-off point is arbitrary. (FUN1: Who funded the initial development of the accreditation organization/programme? fun1_3 = Local government).

Table 3 Description of concordant and discordant attributes identified in Figure 1

Question	Response option: attribute	Attribute possessed by HIC programmes (%)	Attribute possessed by LMIC programmes (%)	Percent difference (%)
Attributes indicating dissimilarities				
How is the programme related to government? (POL1)	pol1_1 = Managed within Ministry of Health	8.33	60.00	51.67
What is the legal status of the accreditation organization? (POL3)	pol3_1 = Government agency	8.33	50.00	41.67
Are successful trainees formally certificated? (TRA5)	tra5_2 = Yes	56.52	89.47	32.95
Who makes the final award decision? (REP5)	rep5_1 = Governing body	37.50	63.16	25.66
Who pays for surveyor training? (TRA1)	tra1_2 = The accreditation organization	78.26	50.00	−28.26
Are HCOs formally requested to evaluate the organization/ programme? (REP10)	rep10_2 = Yes	91.67	63.16	−28.51
How is the organization/programme related to government? (POL1)	pol1_3 = Independent agency with government representation or funding	58.33	20.00	−38.33
What is the legal status of the accreditation organization? (POL3)	pol3_3 = Not-for-profit organization	79.17	40.00	−39.17
Attributes indicating similarities				
Is accreditation an element of government strategy for health care? (POL10)	pol10_3 = Yes, specific strategy for quality and safety	26.67	31.03	4.37
What types of provider HCOs do programmes cover? (POL16)	pol16_1 = Hospital	44.19	48.39	4.20
Who makes the final award decision? (REP5)	rep5_2 = Internal independent panel	25.0	26.32	1.32
How do HCOs pay for accreditation services? (FUN2)	fun2_3 = Per service or product provided	50.00	50.00	0.00
What stakeholders are represented on the governing body? (POL6)	pol6_2 = Clinical professionals, e.g. nurses, doctors	25.61	25.45	−0.16
Do HCOs in remote areas pay the additional costs of surveyor travel? (FUN10)	fun10_3 = All survey travel costs are charged to the HCO	28.57	27.78	−0.79
Are assessment procedures posted on a website which is freely accessible by the public? (REP16)	rep16_2 = Yes	69.57	68.42	−1.14

(*continued*)

Table 3 Continued

Question	Response option: attribute	Attribute possessed by HIC programmes (%)	Attribute possessed by LMIC programmes (%)	Percent difference (%)
Are accreditation results of named HCOs posted on the organization/programme website and freely accessible to the public? (REP13)	rep13_3 = Date certificate expires	29.27	26.92	−2.35
Are mathematical scoring or algorithms used to decide accreditation awards? (REP1)	rep1_3 = Yes, for deciding accreditation award	30.30	26.09	−4.22
Are the names of HCOs which have been refused accreditation or whose status has been withdrawn posted on the organization/programme website and freely accessible to the public? (REP14)	rep14_1 = No	52.17	47.37	−4.81

As illustrated in Fig. 2, the attribute 'pol1_1: Managed within Ministry of Health or separate government agency' is the most discordant; only two HICs possess it: Poland and Portugal.

What is the legal status of the accreditation organization? (POL3)

The legal status of an accreditation programme is dependent upon its relationship to government. However, the dependence is not universal. LMIC programmes, when compared with HICs, are more likely to be within a government ministry or constituted as a government agency ($P = 0.005$) (Fig. 3).

Are healthcare organizations formally requested to evaluate the organization/programme? (REP10)

Twelve, or just over 60% of LMIC accreditation programmes, include an evaluation component for enrolled

Figure 2 Government relatedness of LMIC and HIC accreditation programmes.

Figure 3 Accreditation programmes' comparative legal status.

HCOs. In contrast, 22 of 24, or over 90% of HIC programmes, include an evaluation component ($P = 0.030$) (Fig. 4).

Are successful trainee surveyors formally certificated? (TRA5)

The vast majority of LMIC programmes formally certify trainee surveyors (89%). However, just over half of HIC programmes do (57%; $P = 0.037$) (Fig. 5).

Are mathematical scoring or algorithms used to decide accreditation awards? (REP1)

Both LMIC and HIC accreditation programmes tend to use numerical formulae in their operations (Fig. 6), that is, 30 to 13, respectively. The majority of LMIC programmes (16) do use scoring, while almost half of the HIC programmes (10) do not use scoring. Of those accreditation programmes that do use scoring, LMIC programmes are more likely than HICs to use scoring for determining standards compliance, that is, 10 to 4, respectively. However, LMIC programmes are less likely than HICs to also use both scoring for determining standards compliance and deciding the accreditation award, that is, 4 to 9, respectively.

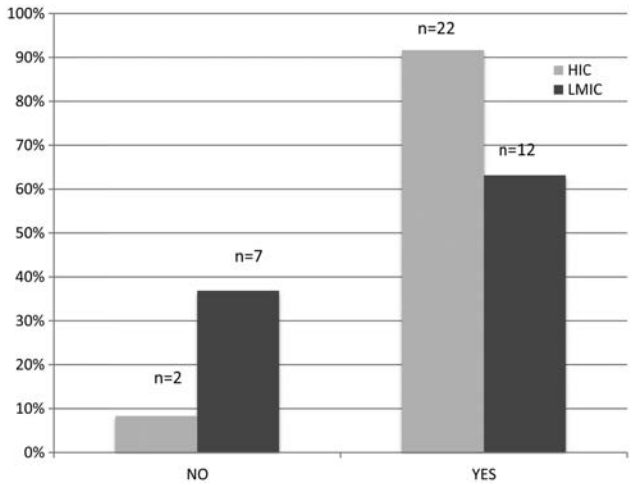

Figure 4 Healthcare organizations formally requested to evaluate the programme. Note: Data missing from one LMIC.

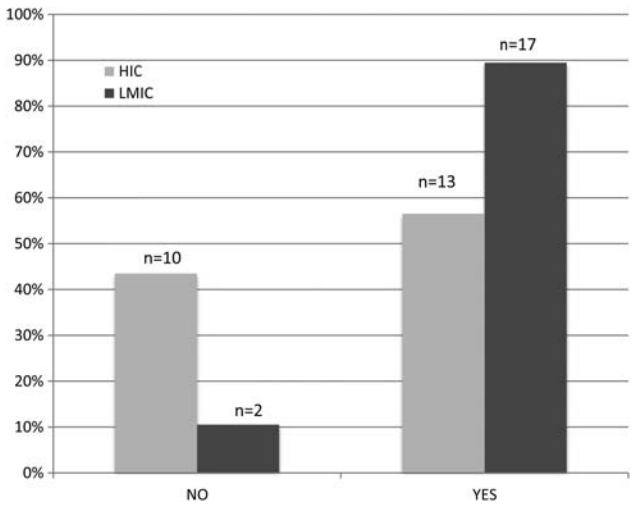

Figure 5 Successful programme trainees are formally certified. Note: Data missing from one LMIC and one HIC.

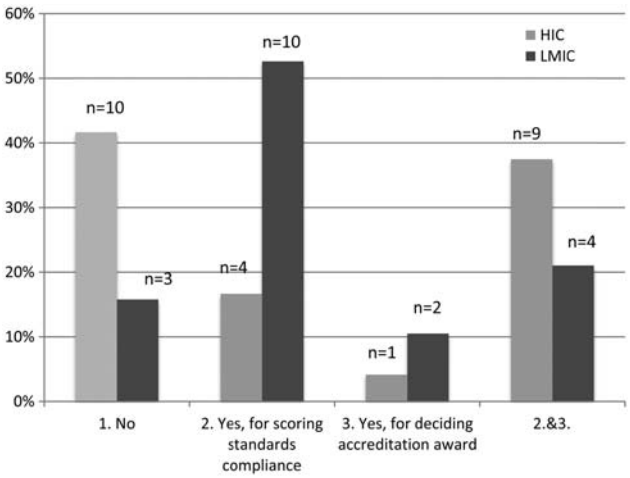

Figure 6 Use of mathematical scoring or algorithms to decide accreditation awards. Note: Data missing from one LMIC.

The attribute of using an algorithm for deciding an accreditation award (rep1_3) is identified as contributing to the evidence of programme similarity irrespective of country income status (Fig. 1). This is explained by the way contingency table statistical testing is performed, that is, on contingency tables with mutually exclusive categories. The more detailed descriptive analysis of organizational attributes does not require the attributes to be mutually exclusive and thus was able to detect the similarity that would be masked otherwise. Despite the high level of agreement on a single attribute, we still accept the overall response to the scoring question as contributing to the evidence of dissimilarity between programmes in LMICs and HICs.

Discussion

The accreditation programmes of LMICs and HICs appear to be more similar than different in many of their characteristics, including governance arrangements, the processes and operations underpinning accreditation, and the use of incentives to encourage participation in accreditation by HCOs. The broad institutional logic of accreditation, of establishing systems to promote improvement, applying standards and providing feedback, seems to be increasingly ubiquitous across countries.

We found that LMICs' accreditation programmes, where they are distinguishable from those of HICs, are less likely to be independent, and more likely to be related to, or legally

associated with, government. Through adopting or maintaining these characteristics, accreditation programmes in LMICs are overcoming some of the barriers to sustainability or reinforcing their efforts to achieve sustainability [12–17]. It is a rational response to resource environments and operational settings of LMICs' health systems that differ from those of HICs. Poorer countries typically have fewer resources to devote to the machinery, institutions and structures supporting healthcare provision or improvement [12, 14]. Additionally, LMIC programmes differ from their HIC counterparts in including more recent innovations in the development of accreditation, such as an evaluation component, certification processes for trainee surveyors and to make decisions on accreditation status based on a formulaic, mathematically oriented approach. It may be that LMICs, which have generally had the benefit of drawing on the expertise of longer-standing HIC and LMIC programmes, have been able to incorporate developments such as these in their accreditation programmes, often via the provision of technical assistance or donor support. This may also be a signal that accreditation is becoming increasingly international, and programmes such as those offered by LMICs are learning from the store of global experience.

Despite growing global interest in accreditation programmes in LMICs, and HICs, the publicly accessible research evidence base is limited [12–17, 31–37]. It would be valuable to have greater access to independent evaluations, technical assistance documentation and donor reports of accreditation programmes in LMICs to increase the stock of knowledge. Accreditation represents a considerable investment, as does the provision of support to LMICs in enhancing it. Learning more about it through extant reports, evaluations and analyses would be beneficial to multiple stakeholders.

Having responded to our first study aim, we can now consider the second question raised in the introduction: are there universal factors that influence the sustainability of an accreditation programme, regardless of income or country? Drawing on published research and our study here, we offer a conditional answer. Accreditation programme sustainability, irrespective of country characteristics, is influenced by: ongoing policy support from government; a sufficient large healthcare market size; stable programme funding; diverse incentives to encourage participation in accreditation by HCOs; and the continual refinement and improvement in accreditation agency operations and programme delivery.

As to limitations, the sample size represented a challenge for statistical analysis. A larger sample could have revealed additional interesting points, and in future international surveys we intend to enroll more organizations. We have applied analytical procedures to identify univariate associations, and have not examined potential confounding, or independent factors associated with more than one variable of interest. These issues are to be addressed in future studies. Some interesting organizational characteristics, such as financial costs and accreditation processes, were left outside the present investigation. This study was cross-sectional and comparative in nature; operational aspects, and longitudinal changes in accreditation, should be addressed in future studies.

Conclusions

Understanding the similarities, differences and factors that sustain accreditation programmes in LMICs, and HICs, can be applied to benefit programmes around the world. Accreditation programmes may be becoming more similar, conforming to an international model more than in the past, and learning from each other. Accreditation programmes are contributing to incremental improvements in quality systems and clinical process in health systems around the world. There are widespread beliefs that a flourishing accreditation programme is one element of the institutional basis for high-quality health care.

Other Contributors

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Presentation graphics: Betina van der Merwe (COHSASA, South Africa), Danielle Marks (UNSW, Australia).

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