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REVIEW

Podiatric Care in Latin America: Workforce, Training and Professional Regulation

Atención podológica en América Latina: fuerza laboral, formación y regulación profesional

Rosa Mariela Herrera Paredes[1]
Avryl Paredes Celis[1]
Brenda Vanesa Báez Escaza[1]

[1] Instituto Universitario de las Naciones Hispanas, Pachuca de Soto, Hidalgo, México.

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ABSTRACT

Podiatric care in Latin America operates within a context of high and rising diabetes-related foot disease, yet the professionals who provide that care remain poorly characterized. This narrative review synthesizes the published evidence on the podiatric workforce, training pathways and professional regulation in Latin America. Scopus, OpenAlex, Crossref and PubMed were searched from 2015 to 2024 without language restriction, complemented by institutional sources, and the synthesis was organized into four thematic axes. The available evidence is fragmented and largely descriptive. Workforce data are indirect; foot care is frequently delegated to nurses, physicians and physiotherapists in the absence of podiatrists, whereas countries with established professions rely on censuses and population models that do not exist in the region. Training is best documented in Cuba, where technical and technologist programs follow an explicit competency model, and coexists in Mexico with technical and bachelor degree routes. Professional regulation is heterogeneous: consolidated in Chile and Uruguay since the mid twentieth century, still pending legislative approval in Brazil and fragmented in Argentina and Mexico. Intrusion and contested scope boundaries are recurring concerns. The main gaps are the absence of workforce statistics, the weak link between disease burden and service delivery, and limited evaluation of training outcomes. Standardized workforce registries, competency frameworks and comparative regulatory research are needed across the region.

Keywords: podiatry; health workforce; professional regulation; professional education; Latin America; diabetic foot.

RESUMEN

La atención podológica en América Latina opera en un contexto de alta y creciente enfermedad del pie asociada a la diabetes, aunque los profesionales que prestan ese cuidado siguen mal caracterizados. Esta revisión narrativa sintetiza la evidencia publicada sobre la fuerza laboral, la formación y la regulación profesional de la podología en América Latina. Se buscó en Scopus, OpenAlex, Crossref y PubMed entre 2015 y 2024, sin restricción de idioma, complementada con fuentes institucionales, y la síntesis se organizó en cuatro ejes temáticos. La evidencia disponible es fragmentada y mayormente descriptiva. Los datos de fuerza laboral son indirectos; el cuidado del pie suele recaer en enfermería, medicina y fisioterapia ante la ausencia de podólogos, mientras que los países con profesiones consolidadas usan censos y modelos poblacionales inexistentes en la región. La formación está mejor documentada en Cuba, con programas técnicos y tecnológicos y un modelo de competencias explícito, y coexiste en México con rutas de técnico y licenciatura. La regulación es heterogénea: consolidada en Chile y Uruguay desde mediados del siglo XX, aún pendiente de aprobación legislativa en Brasil y fragmentada en Argentina y México. El intrusismo y los límites del ámbito de práctica son preocupaciones recurrentes. Los principales vacíos son la ausencia de estadísticas de fuerza laboral, la débil vinculación entre carga de enfermedad y prestación de servicios y la escasa evaluación de los resultados formativos. Se requieren registros estandarizados de fuerza laboral, marcos de competencias e investigación regulatoria comparada en toda la región.

Palabras clave: podología; fuerza laboral en salud; regulación profesional; educación profesional; América Latina; pie diabético.

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INTRODUCTION

Diabetes-related foot disease is a leading and growing source of disability worldwide, and its weight falls disproportionately on low and middle income regions.(1,2) Lower extremity ulcers, infections and amputations concentrate much of this burden, and their prevention depends on systematic foot examination, risk stratification and timely management delivered by adequately trained personnel. In Latin America the epidemiological load is substantial and is documented across several countries. Hospital series from Brazil and Colombia describe recurrent ulcers, infections and amputations among people with diabetes, and Mexican data link major amputation to elevated five year mortality.(3-5)The region also faces rapid demographic aging and a rising prevalence of diabetes, which together expand the population at risk of foot complications, and the prevention of these complications rests on the regular examination of at risk feet, on risk stratification and on the timely removal of callus and pressure, tasks that in well resourced systems belong to a dedicated podiatric workforce. This clinical demand is not matched by a clear picture of who provides foot care in the region, because the occupations responsible for that care are described only in scattered and mostly descriptive reports.

The podiatric professions are the health occupations most directly responsible for foot health, yet their configuration differs sharply between countries. In high income settings podiatry is a regulated, university based profession with defined scopes of practice, workforce planning instruments and accreditation systems.(6,7) In Latin America the situation is far more heterogeneous. Some countries recognize podology through technical or university training, others regulate it by decree or through legislation that has not completed its course, and in several settings foot care is absorbed by nursing, medicine or physiotherapy rather than by podiatrists.(8,9) The available literature is spread across national journals, institutional reports and grey sources, which has limited comparative understanding of the field and of the differences between countries. This dispersion matters because it obscures the capacity of health systems to deliver the foot care that the epidemiological burden demands, and it leaves planners without the denominators required for human resources policy. No prior synthesis has assembled the three dimensions of workforce, training and regulation for the region as a whole, which is the gap that this review addresses.

The objective of this review is to synthesize the published evidence on the podiatric workforce, training and professional regulation in Latin America. Three questions guide the synthesis: how large and how distributed is the podiatric workforce, how are podiatrists trained, and how is the profession regulated across countries. The synthesis is organized around four thematic axes, namely the workforce, education, regulation and the cross cutting gaps that connect them, each of which is examined in turn in the development. The review deliberately includes both peer reviewed and institutional sources, because the regulatory facts that matter most are often recorded outside the scientific literature.

METHODS

A documented search was conducted in four bibliographic sources: Scopus, OpenAlex, Crossref and PubMed. Scopus was used first because its field based queries and journal coverage facilitate the retrieval of both international podiatry literature and Latin American health services research. The searches were performed in English, Spanish and Portuguese and covered the period 2015 to 2024, without language restriction. Search terms combined podiatry and its regional variants (podiatry, podiatrist, podology, podologia, podologo, podologa) with country and regional names and with terms for workforce, education, training, regulation, licensure, professional practice and diabetic foot. The same concepts were searched in Spanish and Portuguese, including formacion, regulacion, ejercicio profesional and pe diabetico, because a large share of the regional literature is published in those languages and outside major commercial databases, and restricting the search to English would have systematically excluded the Cuban, Brazilian and Mexican studies that form the core of this review. Older works were admitted when they were foundational for regulation or when no recent equivalent existed, which is why a 1935 Uruguayan regulation and a long standing Brazilian legislative proposal are included through their institutional sources.

Records were screened for direct relevance to the workforce, training or regulation of podiatric care in Latin America. Studies describing the podiatry workforce, education programs, competency models, professional regulation or the delivery of foot care by podiatrists in the region were retained as core evidence. International studies were retained as comparative anchors for the introduction and discussion but were not used to sustain the development, so that the core of the

review reflects regional rather than imported evidence. Studies limited to clinical techniques or to foot pathology outside Latin America were excluded, together with duplicate reports and records for which no full text or abstract could be retrieved. The synthesis followed the SANRA guidance for narrative reviews: the strategy and selection criteria are reported transparently, but the review does not claim exhaustiveness and does not reproduce a systematic screening flow.(7)

The selected studies were grouped into four thematic axes, and a matrix recorded, for each axis, the claims, the supporting or contradicting studies and their design and limits. The number of studies supporting each axis is reported at the end of the corresponding subsection. The matrix also recorded, for each claim, whether the supporting evidence was a primary study, a review or an institutional source, which informed the strength assigned to each conclusion. Primary studies were given more weight than reviews when both were available, and institutional sources were used only for facts of regulation that no peer reviewed study reported, such as the year of a national decree or the status of a legislative bill. Because the regional literature is heterogeneous in design and mostly observational, the synthesis is qualitative and does not attempt to pool estimates, and no single study is treated as sufficient to establish a claim. Sources that failed to return records, such as accented Spanish queries in one database, were compensated with equivalent searches in the remaining sources, and the sources that actually responded are documented in the working record of the review.

DEVELOPMENT

The podiatric workforce

The available evidence converges on a single structural fact: no Latin American country publishes standardized statistics on the podiatric workforce, so its size and distribution must be inferred from indirect sources. The closest regional approximation comes from Brazil, where a survey of 103 podology professionals, predominantly women, documented the composition, working patterns and physical activity of a workforce that remains outside official health workforce registries.(10) The gender composition of that sample, 96 women among 103 respondents, is consistent with a technical health occupation whose professionalization is still incomplete, and the same study illustrates the descriptive, small sample character of the evidence that exists. No comparable enumeration was identified for any other country in the region, and the absence of a census is not a measurement detail but a structural feature, because it prevents any calculation of density, distribution or shortage.

In the absence of a measured workforce, the clinical identity of the podologist is nevertheless well defined in the Brazilian literature. Authors consistently frame the podologist as the reference professional for diabetic foot prevention and for the care of lower limb ulcers within multidisciplinary teams, a role that presupposes a workforce whose numbers are never stated.(11,12) The same literature describes the podologist performing a thorough assessment of the lower limbs, treating lesions and referring patients to the appropriate specialist, which places the podologist at the entry point of ulcer care and confers a gatekeeping function. The repeated emphasis on the podologist as a reference figure indicates an occupation consolidating its clinical role while its demographic size and geographic distribution remain undocumented. This tension between a recognized function and an uncounted workforce is the defining feature of the region, and it appears in every country for which any evidence exists. It also distinguishes the Latin American situation from the high income systems whose workforce data are cited throughout this review as a contrast.

Because podiatrists are scarce or absent in many settings, foot care is absorbed by other professions. Brazilian studies document nurses performing foot examination, self care education and risk classification in primary care, and one controlled evaluation found that a structured educational intervention improved nurses' knowledge of diabetic foot management, which indicates that in service training can strengthen the foot care delivered by non podiatric personnel in the short term.(13,14) Health education for the diabetic foot is likewise delivered by nurses and by multiprofessional teams rather than by a dedicated podiatric workforce in most documented settings.(9)The supply and demand analysis of diabetes related procedures in the Brazilian public system shows a volume of demand that is not matched by dedicated podiatric personnel, which reinforces the impression of a professional vacuum filled by other occupations.(15)The same studies imply, without stating it directly, that the podological function exists across the health system even where the podologist does not.

A further implication of the workforce evidence concerns professionalization itself. The Bra-

zilian survey describes a predominantly female, technically trained workforce that works outside registries, which suggests that the occupation has not completed the transition from a trade to a regulated health profession.(10)The clinical responsibilities attributed to the podologist in the same literature, namely the assessment of the lower limbs, the treatment of lesions and the referral of complex cases, exceed what an unregistered technical occupation would normally be expected to assume.(12)This mismatch between clinical responsibility and statutory standing is a source of risk for both patients and practitioners, and it explains why regulation is treated as the priority in the Brazilian literature rather than as a secondary concern.

Taken together, the region can document that podiatrists exist, that they are expected to lead diabetic foot prevention and that other professions currently cover the gap, but it cannot say how many podiatrists there are, where they work or how large the gap is. This state of knowledge has direct consequences for planning, because workforce policy cannot be built on the descriptive fragments that currently constitute the evidence. Seven studies support this axis.

Training and education pathways

The training literature is dominated by a single country. The Cuban documentation of podology training is the most extensive in the region and traces the formation of the podology technician from its empirical origins in the seventeenth century through five identifiable stages.(16) The same authors describe the historical evolution of podology within the Cuban health technology system across four stages and define the podological procedures that structure the technical curriculum.(17,18) The Cuban framework distinguishes the services of chiropodology, orthopodology and podological surgery and locates podology within the broader system of health technologies, which gives the training a defined institutional home.(18) The procedures that anchor the curriculum are organized around promotion, prevention, contribution to diagnosis, treatment and rehabilitation of lower limb conditions, with an interprofessional and multidisciplinary orientation. This level of conceptual elaboration has no equivalent in the rest of the region.

The competency approach is explicit in the Cuban literature. Authors identified the professional competencies of health technologists in podology and later proposed a theoretical model for their development.(19,20) The competencies are divided into generic and specific, following the contemporary convergence in higher education toward comparable qualifications, and the model links the competency profile to the podological procedures that the technician must master. Continuous training for the improvement of professional performance is treated as a distinct object of study, on the argument that the technician requires permanent updating to answer the social demands of the profession.(21)Educational software has been developed to support the teaching of podological content, specifically an atlas of the morphological structures of the foot with associated exercises.(22)The Cuban literature is, however, theoretical and descriptive; it does not report outcome evaluations, attrition or comparisons with other countries, which limits its use as a benchmark for the region.

Mexico illustrates a two track system that is documented only in fragments. A technical superior program in podology operates at the Autonomous University of Sinaloa, where collaborative strategies were applied to motivate students and to build microbiology competencies.(23)A public university program compared the emotional intelligence profiles of students in the complementary technical programs of nursing and podology, using the Trait Meta-Mood Scale in a sample of 50 students divided equally between the two programs, and treated podology students as a distinct professional population with specific training needs.(24)These studies describe local teaching interventions rather than the national accreditation or licensing framework, which remains opaque in the published literature. They nevertheless confirm that podology training in Mexico is delivered at technical and complementary levels with an emphasis on competencies, and that its students are the object of pedagogical research even where its regulation is not described.

The clinical training setting appears in the Brazilian literature through a teaching podology clinic whose patient profile was documented for diabetic foot risk, confirming that supervised practice in the region is oriented toward the highest burden condition.(25)This is the only identified description of a podology teaching service in the region, and it suggests that supervised clinical practice exists without being embedded in a published competency or accreditation standard. The contrast between the Cuban and the Mexican literatures is instructive for the region. Cuba describes a single national system with defined competencies and an explicit historical trajectory, whereas Mexico documents isolated institutional experiences without a national frame, which means that the two countries represent opposite ends of a continuum of training consolidation.(16,23) The Brazilian teaching clinic occupies an intermediate position, since it demonstrates supervised clinical

practice but not the accreditation structure that would make that practice transferable between institutions.(25)This continuum is itself undocumented beyond the few studies cited here, so the position of the remaining countries on it is unknown. A regional mapping of podology programs, their level, their duration and their competency frameworks would convert these fragments into a comparable body of evidence.

Irrespective of these fragments, no country other than Cuba presents a coherent account of how podiatrists are formed, at what level and with which competencies, and the diversity of technical, technologist and university routes across countries remains unmapped. The absence of this account is the single largest obstacle to harmonizing training, because competencies cannot be compared until the programs that claim to produce them are described. Ten studies support this axis.

Professional regulation and legal recognition

Regulation is the axis with the widest divergence between countries, and the divergence is qualitative rather than quantitative. Uruguay and Chile consolidated podiatry early: Uruguay regulated pedicure practice in 1935 and integrated its training through the public technical education system, while Chile regulated the profession by decree and later recognized podology as a higher technical level qualification.(26)The association that represents Uruguayan podology technicians documents both the 1935 regulation and the subsequent integration of training into the public technical system, providing the institutional memory that most other countries lack. These early recognitions established podiatry as a regulated occupation before most of the region had any legal framework for it, and they remain the reference points against which later and incomplete processes are measured. Argentina, in contrast, varies by province, with podology recognized as a university profession in some jurisdictions and under a different denomination in others, which fragments the profession across the national territory.(26)

Brazil represents a country where professional recognition is still under construction. A bill regulating the exercise of the podologist has circulated in the national congress since 2005 and was renumbered in 2022 without completing its legislative course.(27)The proposal defines the systematization of podotherapy, the treatment of ingrown nails and hyperkeratotic lesions, antimicrobial podotherapies and the care of minor foot lesions, while reserving dermatological acts to medicine, and it separates the graduate podologist from the technician. The same proposal limits the technician to prophylactic acts and allows the technician to assume podologist functions for a limited period in localities without a podologist, a transitional arrangement that reflects the current shortage rather than a settled division of labor. Registration would be performed by the Federal Council of Biomedicine, an arrangement that reflects the absence of a dedicated podology council in Brazil. The persistence of an unapproved bill means that podologists in Brazil practice without the statutory recognition that their clinical role would justify, a situation the literature frames as unresolved rather than settled.

Colombia offers a reflection on the conceptual, historical and normative status of podology and its field of action, which documents the effort to consolidate the profession within the health system without resolving its regulatory position.(8)The Brazilian clinical literature supplies the substantive argument for formal recognition by positioning the podologist as the reference professional for diabetic foot prevention and for venous ulcer care within multidisciplinary teams, and by documenting preventive podological assistance in a basic health unit.(11,12,28)The basic health unit study in Limeira identified age, duration of diabetes, low schooling, poor metabolic control and lack of specific foot care as risk factors among the population served, which locates the podologist's contribution within a broader preventive agenda.(28) These clinical roles provide the justification for recognition that several countries have not yet completed, but the justification and the legal act remain disconnected. The regulatory timeline itself is telling: Uruguay and Chile settled the question in the first half of the twentieth century, Colombia and Brazil are still debating it in the twenty first, and Argentina has allowed it to fragment by province.(8,26,27)This spread of almost a century in the resolution of the same legal question is difficult to explain by differences in the need for foot care, since the epidemiological burden is shared, and more plausibly reflects the uneven institutionalization of allied health professions across the region. A harmonized definition of the podologist's title and scope would address the fragmentation, but no such regional instrument exists. The pattern across the region is therefore one of early, consolidated and fragmented recognition coexisting side by side, with no common standard for scope or title. Six studies support this axis.

Regional divergence and cross cutting gaps

The fourth axis assembles the gaps that connect workforce, training and regulation, and the first of them is the absence of workforce statistics. No census, registry or population based estimate of podiatrists exists for any Latin American country, and the only available workforce survey is a convenience sample of Brazilian podology professionals.(10)Without a denominator, the region cannot answer the basic planning question of how many podiatrists it has, where they work and what they do, and any claim about shortage or maldistribution rests on inference rather than measurement. The same absence prevents the evaluation of whether the existing training capacity is sufficient for the population served, and it excludes podiatry from the human resources information systems that ministries of health use to allocate budgets and to plan the distribution of health workers. A podiatry workforce that is absent from those systems is also absent from the decisions those systems inform.

The second gap is the weak link between disease burden and service delivery. National series document amputations in Brazil, hospital treatment of diabetic foot ulcers in Colombia and high mortality after major amputation in Mexico, yet none of these studies identifies the podiatric workforce responsible for prevention.(4,5,29)The designs differ, a retrospective state level analysis in Brazil, a hospital series in Colombia and a five year follow up cohort in Mexico, but they share the same silence about the professionals who could have prevented the outcomes they describe. A triage system developed in Latin America for the diabetic foot attack presupposes organized foot care teams that the workforce data cannot confirm.(30)The prevalence of diabetic foot ulcers documented in Brazilian public hospitals therefore coexists with an unmeasured professional response.(3)The supply of diabetes related procedures in Brazil is likewise measured without a corresponding count of the professionals who deliver them, so the epidemiological and the workforce literatures run in parallel without intersecting.(15)

The third gap concerns the quality of prevention. Studies of knowledge and self care practices among people with diabetes in Mexico and Brazil show persistent deficits in foot examination and self care, which indicates that the preventive function is underperformed even where it is formally assigned.(14,31) The Mexican study assessed knowledge and practices of foot care together with the risk of developing ulcers, and the Brazilian study linked knowledge to adherence to self care, both finding gaps that no workforce policy currently addresses. Across these studies the same pattern recurs: the burden is measured, the procedures are counted and the knowledge deficits are described, but the workforce that would close the gap remains invisible. A further consequence is that the region lacks a baseline against which to evaluate change, so any future expansion of podiatric training or recognition cannot be linked to measurable improvements in foot health outcomes.(15) The convergence of these three gaps defines the research frontier of the field, since none of them can be closed without the others being addressed at the same time. Nine studies support this axis.

Table 1. Synthesis of the podiatric care literature in Latin America by thematic axis.

Axis	Key findings	Countries represented	Studies (n)
Workforce	No official workforce statistics; foot care absorbed by nursing, medicine and physiotherapy; podologist framed as reference professional for diabetic foot	Brazil, Mexico	7
Training	Competency based technical and technologist programs documented in Cuba; technical and bachelor routes in Mexico; teaching clinic described in Brazil	Cuba, Mexico, Brazil	10
Regulation	Early consolidation in Uruguay and Chile; pending legislation in Brazil; provincial fragmentation in Argentina; clinical role justifies recognition	Brazil, Uruguay, Chile, Argentina, Colombia	6
Gaps	Missing workforce registries; burden and delivery data unlinked; limited evaluation of prevention quality	Brazil, Mexico, Colombia, Latin America	9

Note: The study counts refer to the distinct works synthesized in each axis; some studies contribute to more than one axis. Source: Own elaboration based on narrative synthesis.

DISCUSSION

The practical implication of this synthesis is that the region cannot plan podiatric care because it does not measure the podiatric workforce, and it cannot strengthen the profession because training and regulation are documented unevenly across countries. The three domains examined here, workforce, training and regulation, are linked rather than independent: formal recognition creates the incentive to train, training produces the measurable workforce, and workforce data enable planning. In Latin America this chain is broken at several points, which is the central finding of the review and the starting point for its policy implications. The evidence assembled here is descriptive, but the pattern it describes is consistent enough to support action.

The workforce findings are consistent with the broader picture of allied health human resources in Latin America, where health professions outside medicine and nursing are frequently undercounted and underregulated.(8)The Brazilian finding that nurses and physicians absorb diabetic foot prevention agrees with studies showing that foot care knowledge and practice in the region reside mainly outside podiatry.(13,14) These results diverge from regulated systems, where podiatry workforces are enumerated and their distribution, remuneration and retention are tracked, and where the resulting data drive rural recruitment and retention policy.(6,32) Recent graduates in those settings report the conditions that attract or repel them from rural practice, and pandemic era surveys describe how a regulated workforce absorbs service disruption, information that no Latin American country currently collects.(33,34) Pre registration employment and apprenticeship models have been proposed to expand podiatry workforce capacity where shortages are measured, which shows the policy instruments that become available only after the workforce is counted.(35)The explanation for the divergence is structural rather than cultural: enumeration requires a register, a register requires legal recognition, and recognition is precisely what several Latin American countries have not completed.(27)The absence of a workforce denominator also explains why burden studies do not connect amputations and ulcers to the professionals available to prevent them.(1,3)

The training evidence shows a deep asymmetry. Cuba has produced a coherent body of work on the podology technician, the competency model and continuous training, but this literature is descriptive and lacks outcome evaluation.(16,20) Mexico documents teaching innovations within technical and university programs without a national competency framework.(23,24) The international education literature, by contrast, is advancing toward competency based assessment, simulation and the measurement of professional identity formation.(36-38)The disagreement between the regional descriptive literature and the international evaluative literature is better understood as a maturity gap than as a conflict: the region is still describing its programs while regulated systems are evaluating them.(39)A comparable lag is visible in the motivators that steer students toward podiatry, which are measured abroad and unknown in Latin America, even though enrolments have declined by 17.3 percent in Australia and New Zealand since 2015 and prompted explicit recruitment strategies.(40)The same applies to teamwork training and to the use of virtual reality in podiatry anatomy teaching, both documented outside the region but absent from its published training record.(41,42) Diabetes related foot care education delivered by podiatrists is itself heterogeneous even in regulated systems, which cautions against assuming that formal recognition alone standardizes training.(43)The Cuban competency model could serve as a regional template precisely because it is explicit, even if its outcomes have not been measured, and its generic and specific competencies could be adapted by other countries as the basis of a shared regional standard.

The regulation axis carries the clearest divergences. Chile and Uruguay resolved recognition early, Brazil has pursued it through a long legislative process, and Argentina and Mexico present subnational fragmentation.(26,27) The concern with intrusion reported in the Spanish literature is echoed, in a different key, by the contested scope boundaries documented in Australia, which suggests that the profession faces boundary disputes both where it is young and where it is mature.(44,45) A comparative case study of prescribing and non prescribing physiotherapists and podiatrists shows how scope of practice is negotiated in regulated systems, a negotiation for which the region has no equivalent published record.(46)The international trajectory toward prescribing, advanced practice and telemedicine implies that Latin American regulators will eventually confront the same scope questions, currently without the workforce data to inform them.(7,47) Public funding for podiatry graduate education in the United States and telehealth use by health workers for diabetes related foot complications illustrate the instruments and the practice changes that regulation must eventually accommodate.(48,49) The clinical literature that positions the podologist as a reference professional in diabetic foot and venous ulcer care supplies the substantive argument for formal recognition, but this argument has not yet been converted into enacted regulation in

the largest countries.(11,12) The distance between the clinical and the regulatory literatures is itself a finding, since the two bodies of work barely cite each other, and closing that distance would give the legal debate the empirical content it currently lacks.

The synthesis also carries an implication for the diabetic foot response specifically. The burden of diabetes related foot disease is measured and growing in the region, and triage instruments such as the Saint Elian wound score already presume the existence of organized foot care teams.(1,30) The present evidence indicates that those teams are staffed largely by nurses and physicians, which suggests that strengthening diabetic foot prevention will require either training and formally recognizing podologists or defining the foot care competencies expected of the professions that already provide it.(9,13) Either path requires the workforce data that are currently absent, so the measurement gap is not an academic concern but the precondition of any credible diabetic foot policy. The choice between these paths involves a policy decision as much as a technical one, because formalizing podology implies a long term investment in training and regulation, whereas strengthening existing professions implies defining foot care competencies within nursing and medical curricula, and both options depend on knowing the current stock of providers. Professional associations, which have preserved institutional memory where governments have not, could supply the initial denominators through voluntary registries while statutory recognition is pursued.(26)

The research agenda that follows from these findings has three tiers. The first tier is descriptive and urgent: standardized workforce registries, a census of training programs and a mapping of the regulatory instruments in force in each country, tasks that professional associations and ministries could undertake jointly and that would convert the current fragments into comparable data.(8,10) The second tier is evaluative: outcome studies of the Cuban competency model, of the Mexican two track system and of the Brazilian teaching clinic, so that training investments can be guided by results rather than by assertion.(20,25) The third tier is comparative and prospective: implementation research on whether the recognition models of Uruguay and Chile produce measurable workforce and outcome advantages over the fragmented models elsewhere, which would give the pending Brazilian legislation and the subnational Argentine arrangements an empirical basis.(26,27) Each tier depends on the one before it, and all three are feasible with the open data and the institutional partnerships that the region already possesses.

Compared with previous reviews, this synthesis is the first to assemble workforce, training and regulation evidence for the whole region rather than for a single country. Earlier works address podology within one country, as in the Colombian reflection, or within one professional function, as in the international reviews of professional practice and of diabetes foot care education.(7,8,43) The present review therefore fills a descriptive gap while confirming that the underlying evidence is thin. Its practical implications are concrete: ministries of health should include podiatry in health workforce registries, professional associations should adopt shared competency frameworks such as those developed in Cuba, and regulators should harmonize recognition criteria across countries. Interprofessional education is a complementary lever, since foot care will continue to be shared across professions in the short term.(50,51) The survey evidence on foot health recommendations in chronic conditions, drawn from high income settings, indicates where regional guidelines could begin even before workforce data exist.(52,53)

Limitations

This review has specific limitations, each with a corresponding recommendation. First, the search was not exhaustive and did not screen grey literature systematically, so national laws, association reports and ministry documents may be underrepresented; a future mapping of regulatory instruments in each country would close this gap. Second, much of the regional literature is published in journals without DOIs and in languages other than English, which complicates retrieval and verification; multilingual searches and regional databases such as SciELO and LILACS should be used in follow up work. Third, most included studies are descriptive, cross sectional or narrative, so no quantitative synthesis of workforce size or training outcomes was possible; prospective registries would supply the missing denominators. Fourth, the comparison with Australia, New Zealand and the United Kingdom is illustrative and does not imply that their models transfer directly to Latin American health systems; comparative implementation research is needed before adoption. Fifth, the review did not interview professional associations or regulators, whose tacit knowledge about workforce and scope is not captured in the published record; structured surveys of national podiatry bodies would complement the documentary evidence. Sixth, the synthesis treats Latin America as a unit while its health systems differ in financing, decentralization and professional culture, so the regional conclusions should be read as a map of common gaps rather than as a

uniform description of every country.

CONCLUSIONS

The podiatric care literature in Latin America is fragmented, descriptive and dominated by a few countries, with Cuba documenting training, Brazil documenting the clinical role of the podologist and several countries still awaiting formal regulation. The podiatric workforce is not measured anywhere in the region, foot care is absorbed by other professions, and the resulting gap between the documented burden of diabetic foot disease and the unknown capacity to prevent it is the central problem for policy. Training is best structured where a competency model exists and weakest where no accreditation framework is published. Regulation ranges from early consolidation in Uruguay and Chile to pending legislation in Brazil and provincial fragmentation in Argentina. The priorities that follow are standardized workforce registries, shared competency frameworks and comparative regulatory research, and they should be pursued jointly by ministries of health, universities and professional associations rather than by any single actor. Without them, podiatric care in Latin America will remain visible in its clinical demand but invisible in its professional supply.

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Writing–review and editing: Rosa Mariela Herrera Paredes, Avryl Paredes Celis, Brenda Vanesa Báez Escaza.