Abstract  This paper aims at proposing validated principles to underpin clinical management as a means to transform healthcare for integrated healthcare systems. The starting point was the conception of clinical management based on structuring elements that do not separate management, care and education. The authors’ proposal was submitted to specialists so that a consensus could be reached. At the end of the process, the following principles of clinical management were presented: (1) Focus on health needs and comprehensive care, (2) Quality and safety in healthcare, (3) Articulation and legitimation of different health practices and types of knowledge to face health problems, (4) Power sharing and co-accountability among managers, health professionals and citizens in healthcare production; (5) Education of people and organizations; (6) Focus on outcomes that add value to health and life; (7) Transparency and accountability regarding collective interests. It is concluded that the principles of clinical management express connections that shed new light on management, healthcare, and education in integrated healthcare systems, requiring critical awareness in relation to the simultaneity of “permanence” and change in practices.

Key words  Clinical management, Delivery of healthcare, Health systems, Health management
Introduction

The creation of integrated health systems gained strength in the second half of the 20th century, with the emergence of the National Health Service - NHS. The Brazilian National Health System (SUS) was influenced by this model, whose most relevant dimensions involved changes in financing, coverage, access to services, and in the comprehensiveness of care. In this field, one of the initiatives with a systemic scope is that of clinical governance, which emerged in the 1990s in the sphere of the NHS. Focusing on quality, it was defined as a system through which health organizations commit to continually improving their services and to maintaining high standards of care, thus creating an adequate environment for clinical excellence.

Clinical governance has influenced other health systems to define and implement policies and guidelines aiming to improve the quality of the clinic, tackling, among other factors, variability in care provision. The authors who take the NHS as reference propose seven pillars for clinical governance: clinical effectiveness, clinical audit, risk management, use of information, education and training, people management, and patient/public involvement. In Spain, this dimension of care is called Gestión Clínica and its main objective is to ensure the provision of comprehensive care, coordinated and centered on the patient. The key concepts are quality and effectiveness, common objectives for all the agents involved, progressive decentralization, autonomy, and co-accountability in the attainment of outcomes. In Australia, publications about clinical governance focus on four dimensions: clinical performance and assessment; professional development; risk and safety; values and involvement of patients/users.

In a literature review about this theme, the authors focused on the period from 2009 to 2013 and found that the articles they collected revealed the permanence of the seven pillars of clinical governance, even though there was polysemy concerning their translation, and discussions about the operational plane, with less emphasis on the meso and macro levels of health management. According to the authors of this review, tensions between standardization-singularization and control-autonomy were not sufficiently problematized, considering the complexity of health work.

In Brazil, although tensions related to the management of health work have been published since the 1980s, the term clinical management was employed by Mendes in 2001. This author used elements of clinical governance and managed care to define it as a set of micromanagement technologies that, based on clinical guidelines, aims to provide:

“high-quality, people-centered, effective healthcare structured on scientific evidence; healthcare that is safe, not causing damages to patients and professionals, efficient, provided with optimal costs, opportune, provided on the right time, equitable, in order to reduce unfair inequalities, and offered in a humanized way.”

If we consider that health organizations provide services through the translation of their professionals’ knowledge into clinical decisions, these professionals’ degree of autonomy and control in the decision-making process is one of the most sensitive elements, both in clinical governance and in managed care. In this context, the lack of recognition or problematization of tensions produced by the control performed by management over the clinic tends to introduce technologies in a verticalized, little contextualized or little singularized way.

To face this challenge, the clinical management approach we defend recognizes the importance of subjects involved in relationships established in comprehensive care and in the consequent learning processes, conceived within the healthcare-management-education trinomial. Therefore, health managers and professionals should build common objectives, for which they share knowledge and professional effort, and in which they are equally involved. In this context, critical awareness and commitment are vectors in the construction of a metapoint of view.

Thus, clinical management - the object of our study - aims at the production of comprehensive care with quality and safety, targeted at people’s and populations’ health needs, by means of the transformation of care, management and education practices.

Based on this definition, principles that characterize a problematizing approach and go beyond the initial marks attributed to the expression “clinical management” in Brazil were identified. The objective of this article is to present the validation of these principles.

Methodology

In this study - which is based on opinions -, we started from our experience and then asked spe-
cialists in the matter to validate it, thus amplifying the forum of opinions in order to reach a consensus. To do this, we adapted the consensus conference technique proposed by Souza et al. 15.

Initially, we revisited our practice of qualifying health professionals in clinical management and developing comprehensive care projects with quality and safety in SUS. This practice revealed challenges concerning the articulation of the three “structuring” axes (healthcare model, health management model and conception of education in health) and the production of critical awareness to singularize quality improvement processes in health services 16. To face these challenges, we created a table of principles with descriptors. The principles were understood as bases or foundations that underpin a clinical management targeted at the transformation of practices.

Then, we selected specialists to play the role of validators. The first selection criterion was to identify authors of articles that focused on themes related, directly or indirectly, to clinical management, registered in the Scientific Electronic Library Online (SciELO), in May 2015. This library was chosen because it contains the main national publications of articles in the area of public health. In addition, we identified professionals involved with the implementation of clinical management proposals in SUS, in the sphere of the Ministry of Health. Based on these two criteria, 15 specialists were chosen. Three of them did not answer the invitation to participate in the study and five refused to participate in it.

The group of specialists was constituted of seven validators: five authors of articles about the theme and two managers. Two authors were associate editors of scientific journals. As we were not dealing exclusively with the quantitative dimension, we did not consider the loss of eight specialists a requisite for not continuing with the study.

After this stage, we sent the table of principles to the validators by electronic mail in June 2015. In this table, each principle could be scored in a scale from 0 to 10, where 0 meant no importance or exclusion and 10, maximum importance. In addition, it was possible to include remarks or suggestions.

The specialists’ scores were treated through the calculation of means and standard deviations. To better understand the obtained results, we held a face-to-face encounter in August 2015, attended by four of the seven validators. In this encounter, the scores and suggestions of exclusion or addition of principles were presented, without disclosing their authors. Each participant gave their opinion about the table and scored the principles individually again (from 0 to 10).

After this encounter, we synthesized the opinions and suggestions to recalculate the mean and standard deviation (SD) of each principle. In the new table, only principles with mean equal to or higher than seven and SD equal to or lower than two were included. We sent the new table to the seven specialists in November 2015 and used the same statistical criteria in the second validation round, which took place in December 2015.

Results

Of the ten principles presented initially to the specialists, five had standard deviation higher than 2.0; therefore, they were not validated (Table 1).

Based on the discussion that occurred in the encounter with the specialists, a new table of principles was developed (Table 2). In this table, suggestions for exclusions and additions were incorporated and some principles that had been validated in the first round were renamed, resulting in seven principles. In the second round, the seven principles were validated.

The first principle of Table 2 obtained an absolute consensus, with a mean of 10 and SD of 0. In the other principles, the consensus was high, as the lowest mean was 8.86 and the highest SD was 1.46.

Discussion

When we examine the validated principles of clinical management, we see that there are significant distinctions in their applicability, according to the health system modeling (Chart 1). Considering relevant elements highlighted by Mendes 10 in the characterization of fragmented systems and healthcare networks, the fragmented systems make five of the seven principles of clinical management impossible.

Regarding integrated systems, we highlight the characteristics of the three “structuring” axes that guided the construction of the seven validated principles: (i) healthcare model; (ii) health management model; and (iii) conception of education in health.

In the first axis, the shift from disease to the health needs of subjects or social groups reorients healthcare. In this sense, the clinic is not
Table 1. Principles of Clinical Management (First Version).

<table>
<thead>
<tr>
<th>Principles</th>
<th>Descriptors</th>
<th>Mean</th>
<th>Standard Deviation</th>
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<tbody>
<tr>
<td>1. Focus on health needs and comprehensive care</td>
<td>Health needs - historically constructed - understood as complex phenomena that encompass biological, psychosocial and cultural dimensions. Comprehensive care as an articulated response from professionals, services and different logics to meet individual and collective health needs. Egalitarian assistance regardless of age, sex, religion, sexual option, political option or socioeconomic and cultural insertion. Professionals and managers who agree on common objectives and share responsibilities, aiming to provide comprehensive care for people and populations.</td>
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<tr>
<td>2. Focus on outcomes that add value to health and life</td>
<td>Employment of standards to improve clinical efficiency, efficacy and effectiveness, aiming to reduce the use of unnecessary resources and considering the value added to users’ quality of life and health. Use of outcome indicators targeted at the promotion of healthy lifestyles and risk, vulnerability and damage reduction.</td>
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<tr>
<td>3. Focus on and responsibility for collective interests</td>
<td>Decision-making oriented by the guidelines of health systems, through the utilization of different perspectives. Accounting in the services/institutions involved in the healthcare network. Guarantee of formal spaces for distinct groups of interest and spaces where they can speak and be heard. Transparency in communication with and provision of information for people, populations, the media and society. Promotion of social control by means of representative colleges.</td>
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<tr>
<td>4. Obtention of the maximum benefit, without causing damages, in healthcare.</td>
<td>Reduction in the risk inherent in the care process and increase in the safety of professionals and users of health services. Reduction in damage to the lowest possible level. Variability reduction in clinical decisions and optimization of outcomes based on the best evidences available.</td>
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<tr>
<td>5. Articulation of management and clinical-epidemiological rationalities</td>
<td>Incorporation of the clinical-epidemiological and management perspectives into care production. Implementation of processes to monitor clinical decisions with the participation of the individuals involved, promoting professionals’ and teams’ autonomy and accountability. Health professionals’ competence profiles including management capacities as a strategy to provide better responses for people’s and societies’ health needs.</td>
<td></td>
<td></td>
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<tr>
<td>6. Articulation and legitimation of different health practices and types of knowledge to face the complexity of health problems</td>
<td>Recognition of the values of patients, users and family, aiming at greater effectiveness. Development of therapeutic plans guided by health needs. Teaching-service partnership to act in the education and qualification of health professionals, articulating the different views of the individuals involved. Multiprofessional teamwork with an interdisciplinary approach. Dialog with popular knowledge in healthcare. Articulation with integrative and complementary practices.</td>
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<tr>
<td>7. Power sharing and co-accountability between services and professionals that act jointly in care management</td>
<td>Responsibility for care shared by professionals, patients, users, families, community and managers. Decision-making process of care networks with participation of the services/professionals involved and managerial mechanisms that promote co-accountability and articulation among different environments and levels of care. Accessible, opportune and effective information and communication systems for professionals and services aiming at the qualification of care. Consensual definition of the responsibility of each point of the healthcare network in the promotion of comprehensive care targeted at collective interests. Establishment of articulated cooperation processes among actors (including users) and institutions involved in the healthcare network. Incentive to participation and stimulation of professionals’ autonomy and creativity in the collective construction of care plans. Teamwork, respecting different types of knowledge and potentialities.</td>
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It continues
reduced to the diagnosis and treatment of the
disease as a pathological entity, with its etiological
and nosological aspects. Canguilhem highlighted the challenge of disregarding the existence of the pathological in itself, examining it in a relationship with the individual and the society. Cecílio argues that, when we take health needs as the reference, teams of professionals and management levels are able to achieve “a good device to qualify and humanize the health services”. So that clinical management is able to operate in the logic of health needs, it cannot be limited to the biological dimension nor act in isolation, as “no isolated level of the health systems has competence or all the necessary resources to meet the health needs of a population”.

The second axis regards the management model. Paula draws a comparison between managerialism and social management that is, to some extent, related to this shift. To the author, the first model is aligned with the functionalist conception, without taking political processes into account. According to her, there are limits and positive points in the two models. Without reducing managerialism to the fact of merely focusing on tasks, we understand that the validated principles are linked to a democratic and participative management, requiring, according

<table>
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<tr>
<th>Principles</th>
<th>Descriptors</th>
<th>Mean</th>
<th>Standard Deviation</th>
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<tr>
<td>8. Recognition of the other as a legitimate subject in shared decision-making</td>
<td>Patient/user as subject in care management, with legitimate opinions and desires. Decisions about care shared in the team. Educational actions grounded on respect for and acceptance of people as legitimate subjects in the decision-making about their own health and way of dealing with life.</td>
<td>7.57</td>
<td>3.82</td>
</tr>
<tr>
<td>9. Adoption of reflectiveness, in which thought and action co-exist and influence one another in the reproduction and transformation of practices</td>
<td>Reflective dialog between clinical management actions and information about the reality where these actions are inserted. Understanding clinical management activities as activities that can be reviewed in light of new information. Permanent assessment and reformulation of clinical management practices in light of new information.</td>
<td>8.00</td>
<td>3.70</td>
</tr>
<tr>
<td>10. Recognition of people's and organizations' capacity to learn how to learn in view of the incompleteness of knowledge</td>
<td>Recognition of the importance of innovation and improvement in care processes. Recognition of the effort to overcome difficulties or limitations in health work. Promotion of patients', family's and teams' autonomy in health production. Amplified investigation of health needs with formulation of questions and hypotheses in the identification of problems and care production. Development of educational practices that respect and consider the previous knowledge of all the people involved. Educational practices that take into account the individual sociocultural context and the service's, institution's or network's context. Knowledge and learning production based on the reality of health work and on problems of the daily routine, with encouragement to critical and reflective thought and transformation of practices. Generation and dissemination of knowledge that is relevant to the provision of healthcare for people and to the quality of the produced services. Utilization of mistakes and successes as subsidies to improve performance. Facilitation of access to information and a communication policy that promotes communication channels between professionals and services of the healthcare network. Development of clinical audit in the perspective of a problematizing learning.</td>
<td>9.83</td>
<td>0.41</td>
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Table 2. Principles of Clinical Management.

<table>
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<tr>
<th>Principles</th>
<th>Descriptors</th>
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<th>SD</th>
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<tbody>
<tr>
<td>1. Focus on health needs and comprehensive care</td>
<td>The health needs of people and groups are complex, historically constructed phenomena that encompass the biological, psychosocial and cultural dimensions. Comprehensiveness of care as the guide to the organization of healthcare.</td>
<td>10.00</td>
<td>0.00</td>
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<tr>
<td>2. Quality and safety in healthcare</td>
<td>The obtention of maximum benefit by means of the continuous improvement in care quality and safety occurs by reducing the risk inherent in the care process for all the individuals involved, reducing damage to the lowest possible level, reducing the variability of clinical decisions according to the best evidences, and increasing safety.</td>
<td>9.71</td>
<td>0.49</td>
</tr>
<tr>
<td>3. Articulation and legitimation of different health practices and types of knowledge to face health problems</td>
<td>The development of care plans focuses on health needs and on multiprofessional teamwork with an interdisciplinary approach, compatible with the complex nature of the problems. The dialog between different healthcare practices and types of knowledge and the legitimation of user’s and family’s values and preferences aim to increase the effectiveness of healthcare. The sharing of teaching and service perspectives contributes to the education and qualification of health professionals in the work context.</td>
<td>9.43</td>
<td>0.79</td>
</tr>
<tr>
<td>4. Power sharing and co-accountability among managers, health professionals and citizens in healthcare production</td>
<td>The decision-making process in care networks with the participation of the services/professionals involved and the managerial mechanisms promote co-accountability and articulation among different environments and levels of care. The consensual definition of the responsibility of each point of the healthcare network takes into account: the promotion of comprehensive care targeted at collective interests; the integration of information and communication systems for shared decision-making; the establishment of articulated processes of cooperation among actors and institutions involved; incentive to participation and stimulation of professionals’ autonomy and creativity in the collective construction of care plans; teamwork, respecting different types of knowledge and potentialities; and responsibility for care shared among professionals, patients, families, community and managers.</td>
<td>9.29</td>
<td>1.25</td>
</tr>
<tr>
<td>5. Education of people and organizations</td>
<td>Educational practices view the individual sociocultural context and the service’s, institution’s or network’s context that are present in learning as knowledge construction. Health problems and challenges trigger learning, which takes into account the individuals’ previous knowledge, values, desires and interests. The reflective dialog between clinical management actions and the information about the reality enables to understand that practices can be reviewed in light of new information. Organizational education is seen as an articulated, upward and downward process involving all the spheres of work. The culture of permanent education and continuous assessment within the daily routine of work reorients health practices under the perspective of an organization that transforms itself. The utilization of mistakes and successes as subsidies to improve performance includes clinical audit, which assumes a perspective of problematizing and educational learning. The generation and dissemination of knowledge that is relevant to health production value the innovation of products and processes in healthcare, aiming to amplify the access to innovations.</td>
<td>9.00</td>
<td>0.82</td>
</tr>
<tr>
<td>6. Focus on outcomes that add value to health and life</td>
<td>The employment of standards to improve the efficiency and effectiveness of care by means of the use of outcome indicators targeted at the promotion of healthy lifestyles aims to reduce the use of unnecessary resources and to produce users’ health and autonomy.</td>
<td>9.00</td>
<td>1.15</td>
</tr>
<tr>
<td>7. Transparency and accountability regarding collective interests</td>
<td>Transparency in information and communication with people, populations, the media and society is present in decision-making and in the accounting of services and institutions involved in the healthcare network. Accountability for collective interests is expressed in the commitment to the health system’s guidelines, respecting the diversity of perspectives and the promotion of social control.</td>
<td>8.86</td>
<td>1.46</td>
</tr>
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</table>
to Campos\textsuperscript{21}, a combination of autonomy and responsibility, with creativity and health commitment.

Finally, the conception of education as the third axis implies the understanding that learning occurs as the result of social interaction processes, in which knowledge and practices are built in the relationship between the subject who learns and objects to be learned\textsuperscript{22}. This conception shifts educational processes from hierarchized relationships to dialogic relationships among subjects who exchange knowledge, values, desires and interests, and, because of this, transform practices.

In addition to the shifts in the three axes, there are transversal aspects of the principles in question. One of them refers to the way of dealing with and considering the other in health work relationships. When people are considered legitimate in their singularity\textsuperscript{23}, there is the construction of a metapoint of view\textsuperscript{14} in relation to different perspectives attributed to the health-disease process. In the care model, this orientation amplifies the focus given by the professional and biomedical knowledge perspective, including the subjective and social dimensions of health production in the explanation of phenomena and in agreements on interventions, respecting patients’ interests and desires. In the management and education models, the construction of subjects’ protagonism and co-accountability requires the expansion of critical and reflective awareness and the sharing of power.

Another aspect that traverses the principles is the transformation of practices. In human societies, this occurs by means of learning. Although Polanyi\textsuperscript{24} and Hobsbaum\textsuperscript{25} argue that the production of material wealth is the ultimate determinant of social transformations, they recognize the influence of political, cultural and educational components on these processes. According to Piketty\textsuperscript{26}, dissemination of knowledge and competence is one of the most important convergence mechanisms to improve distribution of wealth and reduce inequalities. Thus, education enables a critical reflection on the way society organizes itself, potentializing this force of convergence for transformation processes.

Just like people learn, organizations formed by people can also learn\textsuperscript{27}. An organization where power is shared can generate upward and downward movements both in the management and in the permanent education of the individuals involved. In addition, it can promote the construction of a culture of assessment, aiming to reorient health practices by means of the utilization of mistakes and successes as subsidies to improve performance.

Finally, the third transversal aspect is the production of comprehensive care. Here, comprehensiveness should be understood in a broad way. We agree with Ayres et al.\textsuperscript{28}, who consider this expression based on four axes targeted at needs, purposes, articulations and interactions. To Ayres\textsuperscript{29}, care and comprehensiveness are similar ideas, even though in the unreachable limit of utopia and, because of this, indispensable. Comprehensiveness of care as a principle is, to this author, what challenges us to do what and how to meet health needs.

Final remarks

The possible connections among management, healthcare and education that are configured in the sphere of clinical management can be understood in light of social contemporaneity. When we try to understand them, we make an association with aspects of Bauman’s conception\textsuperscript{30}. To this author, the relationships between individuals and institutions tend to become less frequent and

<table>
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<tr>
<th>Fragmented systems</th>
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<td>Hierarchical organ</td>
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<td>Fragmented, discont</td>
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<td>Irregular safety a</td>
<td>Safety and quality</td>
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<td>Fragmented informa</td>
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lasting, as they are inserted in a period of fluidity, volatility, uncertainty and insecurity (liquid modernity) that has replaced a previous period marked by more solid references.

When we put the principles of clinical management proposed here into practice, we believe that we will experience tensions between permanence and change, as these principles translate a problematizing approach to health practices whose vector lies in critical awareness and dialogism for the production of transformational interventions. Transformations in the three structuring axes must be constructed by articulating different types of knowledge and sharing the power to decide among managers, professionals and users, aiming at comprehensive, high-quality and safe care, focusing on people’s and populations’ health needs. To be able to live with these challenges, it is important that we learn to experience simultaneity between alleged certainties and uncertainties, by means of a critical awareness open to change.

Collaborations

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References


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