Ethical problems in the clinical practice of mobile pre-hospital care nurses: a scoping review

Problemas éticos na prática clínica de enfermeiros do atendimento pré-hospitalar móvel: scoping review

ABSTRACT

Objective: To map the ethical problems experienced by nurses in Mobile Pre-hospital Care in the literature. Method: A scoping review was conducted following the Joanna Briggs Institute recommendations, from October to November 2021, with searches in Latin American and Caribbean Health Sciences (LILACS), Web of Science, SAGE Journal, Medical Literature Analysis and Retrieval System Online (MEDLINE/PubMed) and Cumulative Index to Nursing and Allied Health Literature (CINAHL). Results: Nine studies comprised the final sample. Ethical problems experienced in the clinical practice of Pre-hospital Mobile Care nurses were presented in four thematic categories: Team/user/family relationship ethics, Inter-team relationship ethics, Organizational structure and management ethics, and External factors and mobile pre-hospital care ethics. Conclusion: The evidence pointed to the need for attention to the ethical dimension, to the values and duties involved in morally inappropriate situations experienced by nurses in the pre-hospital setting. Descriptors: Nursing; Bioethics; Emergency Relief.

RESUMO

Objetivo: Mapear na literatura os problemas éticos vivenciados por enfermeiros atuantes no Atendimento Pré-hospitalar Móvel. Método: Revisão de escopo que seguiu as recomendações do Joanna Briggs Institute (JBI), realizada de outubro a novembro de 2021, com buscas nas bases de dados Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), Web of Science, SAGE Journal, Medical Literature Analysis and Retrieval System Online (MEDLINE/PubMed) e Cumulative Index to Nursing and Allied Health Literature (CINAHL). Resultados: Nove estudos constituíram a amostra final. Os problemas éticos vivenciados na prática clínica de enfermeiros do Atendimento Pré-hospitalar Móvel foram apresentados em quatro categorias temáticas: Problemas éticos na relação equipe/usuário/família; Problemas éticos na relação entre as equipes; Problemas éticos relacionados à estrutura organizacional e gestão; e Problemas éticos relacionados aos fatores externos que interferem no cenário do Atendimento Pré-hospitalar Móvel. Conclusão: As evidências apontaram a necessidade de atenção à dimensão ética, aos valores e deveres implicados nas situações moralmente inadequadas vivenciadas por enfermeiros no cenário na rua. Descritores: Enfermagem; Bioética; Socorro de Urgência.

INTRODUCTION

Mobile Pre-hospital Care (MPHC) is a set of technical procedures provided to a victim of an accident or any other injury in the shortest possible time. Specialized professionals carry out the actions to ensure better survival for the user, through continuous and safe assistance, at the place of occurrence while driving until arrival at the referenced health institution for the definitive treatment\(^1\).

Embodied in care practices and operating within a context involving diverse moral perspectives, a study conducted in Sweden on the reflective and collaborative skills of nurses working in ambulances elucidates the crucial role of ethical knowledge and experience in the development of competencies and decision-making during the assessment of challenging situations\(^2\).

The care provided by the mobile emergency component teams presents a...
propitious scenario of the inaccuracy of the situations that professionals will encounter, in the workplace, when combined with external factors and stressors, in addition to ethical issues that impact the care provided\(^3\). In this sense, the context of clinical practice in different scenarios requires ethical-professional decision-making guided by clinical protocols and bioethical principles that guide the conduct of challenging and conflicting situations, propelling ethical issues\(^4\). Ethical Problems (EP) involve cases where conflicting values and duties arise, leading to professional uncertainty regarding their resolution. Consequently, no ready-made guidelines are available for practical decision-making in such cases\(^5-6\).

A study conducted among ambulance nurses in Sweden highlights the patient’s interests, professional ideals, organizational/managerial structure, social ideas, and the interference of other individuals and/or professionals during the moment of care as the main factors leading to the tensioning of values, norms, and duties in situations of ethical conflicts\(^7\). However, early identification of ethical problems in the context of MPHC enables conflict mitigation, and the development of competencies and ethical sensitivity among nursing professionals\(^8\). It is worth noting that a preliminary search in the Prospective Register of Systematic Reviews (PROSPERO) resulted in no systematic reviews on ethical problems in the context of MPHC or registered review protocols. Additionally, no systematic or scoping reviews on the study’s subject were identified in the Open Science Framework (OSF).

Initially, the LILACS and MEDLINE/PubMed databases were explored, and titles, abstracts, and descriptors were analyzed to develop search strategies. Subsequently, the second stage of the search was conducted across all selected databases. Grey literature was also consulted through the following portals: Catalog of Theses and Dissertations of the Coordination for the Improvement of Higher Education Personnel (CAPES); Open Gray; Repositórios Científicos de Acesso Aberto de Portugal (RCAAP); and WordWideScience.org – The Global Science Gateway. Furthermore, a third stage involved a backward search process, examining the references of selected articles and considering the references within those references to expand the metadata and include additional studies.

METHOD

Study design
This review complied with the Joanna Briggs Institute (JBI) recommendations published in 2020, which highlights the following operational steps: title; title and question development; introduction; inclusion criteria; research strategy; selection of informational sources; data extraction; analysis of evidence; and presentation of results\(^9\). The protocol items defined by the PRISMA Extension for Scoping Reviews (PRISMA – ScR) were also adopted to maintain the rigor of reporting and systematizing data\(^10\).

Protocol and registration
The protocol that guided this review was registered in the Open Science Framework (OSF) and can be accessed through the link http://osf.io/ps-9ra, with DOI number: 10.17605/OSF.IO/PS9RA.

Informational sources
The sources were accessed through the Portal of Journals from the Coordination for the Improvement of Higher Education Personnel (CAPES), using the CAFe platform (Federated Academic Community), comprising the following databases: Latin American and Caribbean Health Sciences Literature (LILACS), Web of Science, SAGE Journal, Medical Literature Analysis and Retrieval System Online (MEDLINE/PubMed), and Cumulative Index to Nursing and Allied Health Literature (CINAHL).

Eligibility criteria
This study did not adopt language or time restrictions to explore further metadata on ethical problems in the MPHC context. Scientific texts that provided comprehensive information on the population of nurses and ethical problems in the MPHC were included, encompassing various study designs. Editorial letters, conference abstracts, and studies not addressing the research question were excluded. Grey literature was also consulted through the following portals: Catalog of Theses and Dissertations of the Coordination for the Improvement of Higher Education Personnel (CAPES); Open Gray; Repositórios Científicos de Acesso Aberto de Portugal (RCAAP); and WordWideScience.org – The Global Science Gateway.

Data collection
The data collection took place from October to November 2021, with the screening carried out...
by two independent researchers, with expertise in the theme of Bioethics, by exporting the data to the Rayyan online tool, providing for the fulfillment of better systematization of the selection of articles, the control inconsistencies between peers, and the definition of consensus. The researchers had regular online meetings to discuss the process and therefore strengthen the reliability of the selection process.

The search strategy adopted in each database involved descriptors/keywords, considering the mnemonic P - (Population / nurses); C - (Concept / ethical problems); and C - (Context / mobile pre-hospital care), as shown in Figure 1.

### Data extraction
A synoptic table was created for the data extraction, based on the JBI guidelines, containing the elements: authors, year, country of study, objective, design, and population.

### Synthesis of results
The research results were treated by descriptive data analysis, using the presentation in tables and thematic categories.

### RESULTS
Data collection began with the collection of 847 published studies on the subject. Of these, nine were eligible to compose the final sample of this study, as shown in Figure 2. The other studies

<table>
<thead>
<tr>
<th>Data sources</th>
<th>Adopted syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>LILACS</td>
<td>(enfermagem) OR (nursing) OR (enfermeria) AND (ética) OR (ethics) OR (ética) AND (&quot;Socorro de urgência&quot;) OR (&quot;Emergency Relief&quot;) OR (&quot;socorro de urgência&quot;)</td>
</tr>
<tr>
<td>CINAHL</td>
<td>(nurse) OR (nurses OR nursing) AND (ethics) OR (ethical dilemmas) OR (bioethics) AND (prehospital) OR (ambulances)</td>
</tr>
<tr>
<td>MEDLINE/PubMed</td>
<td>(Nurs*) AND (Ethics) AND (Prehospital)</td>
</tr>
<tr>
<td>Web of Science</td>
<td>TS=(nursing) AND TS=(ethics) AND TS= (prehospital)</td>
</tr>
<tr>
<td>SAGE Journal</td>
<td>(nurse) AND (ethics) AND (prehospital)</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors, 2021.

**Figure 1** - Search syntax performed in the databases. Salvador, BA, Brazil, 2021

**Figure 2** - PRISMA flowchart depicting the search process. Salvador, BA, Brazil, 2021
referred to emergencies in hospital settings, conflicting situations among other health professionals in different contexts, or did not meet the PCC acronym requirements. The sample consisted of eight articles and a dissertation from the area of ethics and bioethics in the MPHC scenario, carried out in Sweden, Iran, Turkey, and Brazil.

Regarding the study designs, qualitative methods prevailed in the delimited search on the phenomenon of ethical problems, given the theoretical-reflective discussion of the theme. The studies included in the sample were published between 2006 and 2020, with a notable emphasis on an article published in 2006. This particular article served as a fieldwork study.

<table>
<thead>
<tr>
<th>Articles (countries)</th>
<th>Authors, Years</th>
<th>Objectives</th>
<th>Design/Study population</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1(7) Sweden</td>
<td>Sandman L; Nordmark A, 2006</td>
<td>Analyze and describe the ethical conflicts professionals face in the pre-hospital emergency environment.</td>
<td>Qualitative study with 29 participants (nurses and paramedics)</td>
</tr>
<tr>
<td>E2(11) Brazil</td>
<td>Santana JCB; Silva RCL; Souza VAG; Graças APRM; Oliveira MM; Tálamo CP, 2012</td>
<td>To describe what health professionals of the mobile pre-hospital care service think about humanization and ethics in the care of victims.</td>
<td>Qualitative study with 17 professionals working in a SAMU (doctors, nursing technicians, and nurses).</td>
</tr>
<tr>
<td>E3(12) Turkey</td>
<td>Erbay H; Alan S; Kadioglu S, 2014</td>
<td>Identify the opinion of health professionals of emergency about the refusal of treatment.</td>
<td>Qualitative study, applying a form between 356 health professionals who work in the ambulance service (36 nurses).</td>
</tr>
<tr>
<td>E4(13) Brazil</td>
<td>Oliveira SS, 2014</td>
<td>To understand the experience lived by nurses regarding moral deliberation in mobile pre-hospital care.</td>
<td>Qualitative study, with a phenomenological approach, with 12 nurses working in the mobile units of a metropolitan SAMU.</td>
</tr>
<tr>
<td>E5(14) Iran</td>
<td>Torabi M; Borhani F; Abbaszadeh A; Atashzadeh-Shoorideh F, 2017</td>
<td>To describe the experiences of Iranian pre-hospital emergency personnel in ethical decision-making.</td>
<td>Qualitative study with 15 professionals (nurses, graduates in emergency medical service, and emergency medical technicians).</td>
</tr>
<tr>
<td>E6(15) Sweden</td>
<td>Karlsson M; Karlsson N, Hilli Y, 2017</td>
<td>To investigate the experiences of nurses specialized in Swedish ambulances with ethical dilemmas associated with cardiac arrest situations in adult patients’ homes.</td>
<td>Qualitative study, with 9 ambulance nurses from Sweden.</td>
</tr>
<tr>
<td>E7(16) Iran</td>
<td>Torabi M; Borhani F; Abbaszadeh A; Atashzadeh-Shoorideh F, 2018</td>
<td>Identify and describe the experience of occurrences of pre-hospital emergency service personnel in decision-making when faced with ethical dilemmas.</td>
<td>Qualitative study with 14 professionals from the medical emergency service, of which seven were nurses.</td>
</tr>
<tr>
<td>E8(17) Iran</td>
<td>Torabi M; Borhani F; Abbaszadeh A; Atashzadeh-Shoorideh F, 2019</td>
<td>To identify barriers to ethical decision-making by pre-hospital care professionals in Iran.</td>
<td>Qualitative study with thematic category analysis, with 15 professionals from the emergency medical service and seven nurses.</td>
</tr>
<tr>
<td>E9(18) Sweden</td>
<td>Bremer A; Holmberg M, 2020</td>
<td>To describe ethical conflicts in relationships with patients experienced by postgraduate emergency students during clinical studies in an ambulance.</td>
<td>Qualitative study with 69 graduate students in emergency nursing.</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors, 2021.

**Figure 3** - Characterization of the studies included in the scoping review. Salvador, BA, Brazil, 2021
that shed light on the significant ethical conflicts experienced by the MPHC team. The remaining studies were conducted within the last nine years of the period above.

Regarding the participants of the study, they consisted of practicing nurses in ambulance services or paramedics. Only one of the studies presented a sample of postgraduate nursing students, illustrating the specialized training of nurses in ambulance services (18).

Among the studies, 28% highlighted patient refusal of treatment/attendance and transportation and instances of interference from the public during care. Another significant finding, reported by 22% of the sample, described futile treatments (interventions that do not benefit the patient) and the influence of cultural and religious norms on care, as well as compromising patient autonomy. These were identified as the primary ethical issues in the context of MPHC, as shown in Figure 3. Furthermore, it was observed that most studies conducted in Iran and Sweden emphasized cultural and religious values as defining principles in ethical matters.

After analyzing the sample, the ethical problems were grouped and presented in thematic categories: Team/user/family relationship ethics, Inter-team relationship ethics, Organizational structure and management ethics, External factors, and mobile pre-hospital care ethics, as shown in Figure 4.

The discussion considered the primary elements evidenced in ethical problems in the MPHC scenario.

**DISCUSSION**

This scoping review made it possible to map the production of knowledge about the ethical problems experienced in the clinical practice of MPHC nurses. To this end, the main problems arising from the tension between the values, duties, and principles existing in the practice of nurses were categorized.

There was a predominance of studies conducted in Sweden and Iran, consistent with the findings of a systematic review of the science of nursing in emergency services. The research also considered that non-clinical factors, such as ethical conflicts, illustrate moral implications and therefore need to be guided in the practical management of professionals, as their management is essential to minimize the suffering of the team, patients, and family members (19).

In the first category, Team/user/family relationship ethics, studies highlighted the uniqueness and adversity of prehospital care as an interface (7,11-18). The nurse has also been shown to be an actor in the care process who, together with team members, experiences ethical conflicts in the street setting (13).

Patient refusal related to treatment or transport has been configured as the primary ethical pro-

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**THEMATIC CATEGORIES**

**MAIN ETHICAL PROBLEMS IN MPHC**

<table>
<thead>
<tr>
<th>TEAM/USER/FAMILY RELATIONSHIP ETHICS</th>
<th>Patient refusal (7,12,14,17-18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professional ideal with consideration of age or social situation (7,17)</td>
</tr>
<tr>
<td></td>
<td>Disrespecting the patient's autonomy (11-12,17-18)</td>
</tr>
<tr>
<td></td>
<td>Care is influenced by cultural and religious norms (7,13,17)</td>
</tr>
<tr>
<td></td>
<td>Futile treatment (11,14-15)</td>
</tr>
<tr>
<td></td>
<td>User privacy compromise (13,16)</td>
</tr>
<tr>
<td></td>
<td>Ineffective communication between team/user/family (17-18)</td>
</tr>
<tr>
<td></td>
<td>Violation of confidentiality during healthcare (7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTER-TEAM RELATIONSHIP ETHICS</th>
<th>Lack of knowledge and experience (13,16-17)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disrespect between team members (13)</td>
</tr>
<tr>
<td></td>
<td>Disagreement between regulatory and intervention physicians (13)</td>
</tr>
<tr>
<td></td>
<td>Barriers to communication between teams (12)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORGANIZATIONAL STRUCTURE AND MANAGEMENT ETHICS</th>
<th>Transport of non-emergency patients (7,17)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Scarcity of resources (7,17)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>EXTERNAL FACTORS AND MOBILE PRE-HOSPITAL CARE ETHICS</th>
<th>Interference of care by bystanders present in the scene (8,15,17,19)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Working in high-risk scenarios that compromise the safety of the team (11,14)</td>
</tr>
<tr>
<td></td>
<td>Interference from other professionals present at the incident scene (7)</td>
</tr>
<tr>
<td></td>
<td>Compromising the privacy of the professional (13)</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors, 2021.

*Figure 4 - Main ethical problems in the MPHC. Salvador, BA, Brazil, 2021*
problem, characterized as a major obstacle in borderline situations that strains the user’s right to choose and professional responsibility\(^{(7,12,14,17-18)}\). In some studies\(^{(11,14-15)}\), nurses also identified conflicts related to resuscitation and ineffective treatment, as the decisions to start and stop CPR are associated with communication barriers between teams/users and family members. Similarly, a study in Turkey highlights that the ethical conflict for paramedics regarding the cessation of CPR seems to differ when the age factor is considered\(^{(20)}\).

Ethical problems related to “care influenced by religious and cultural judgments, age”, “professional ideals” and “patients’ disregard for economic issues” were present in the studies\(^{(7,15-18)}\). Thus, when considered in isolation, professional values weaken emergency care\(^{(7,15)}\).

A study conducted on personal and professional values points out that the identification and discussion of values such as human dignity, privacy, justice, user autonomy, commitment, human relationships, and professional competence contribute to the mitigation and resolution of ethical problems, strengthening the practice of care appropriate to the needs of users, in health care services\(^{(21)}\). It is also considered that compassion, objectivity, and patient advocacy are values involved in the practice of MPHC\(^{(17-18)}\).

Thus, violation of the guarantee of autonomy\(^{(11-12,17-18)}\), maintenance of user privacy\(^{(13,16)}\), and confidentiality\(^{(7)}\) have also been presented as ethical problems. In the context of MPHC, it has been emphasized that in many circumstances, decision-making is made only from the perspective of the professionals, regardless of the patient’s will, with paternalism prevailing during healthcare\(^{(17-18)}\). Professionals also perceive poor therapeutic communication skills as a barrier to ethical decision-making\(^{(12,17-18)}\).

In the second category, Inter-team relationship ethics, communication difficulties, and disrespect among members of prehospital teams were identified as frequent ethical conflicts faced by nurses in the MPHC scenario\(^{(15,17-18)}\). This finding converges with an integrative review of ethical problems in primary care\(^{(22)}\) and another field study that investigated the phenomenon in the clinical practice of nurses working in a medical clinic unit of a university hospital\(^{(23)}\).

It is also emphasized that the gaps in the development of social interactions between teams, with obstacles in the communication between professionals working in the intervention and the regulatory system of the mobile units, are potentiators of ethical problems in the MPHC\(^{(13)}\).

In the Brazilian scenario, the disagreement between regulatory and intervention physicians\(^{(13)}\) has also been observed as an ethical conflict. Similarly, a study carried out with nurses working in ambulance services in Sweden expresses that strategic communication and collaboration are key elements of competence. The ethical professional as it favors satisfactory management in contexts involving families and patients in borderline and stressful situations\(^{(3)}\).

It has been found that the lack of technical knowledge and experience of MPHC team members is a trigger for EP\(^{(13,16-17)}\). However, the activities carried out in emergency services require a permanent professional qualification corresponding to the specificities of care concerning prevention, protection, and restoration of health\(^{(24)}\). In the third category, Organizational structure and management ethics, studies have also highlighted the scarcity of material resources\(^{(7,17)}\). It is noted that the experience of borderline situations requires actions from the nurse that, if not supported by safe practices, may compromise the quality of care and lead to morally inappropriate practices\(^{(13,17)}\).

Ethical problems have also been identified in the prehospital setting, such as the transfer of non-emergency users and the transport of non-emergency patients. These situations describe difficulties with the organizational functionality of the service, which mischaracterizes the care model and disregards the right of access of those who need assistance\(^{(7,17)}\).

In the fourth thematic category, External factors and mobile pre-hospital care ethics, the studies showed the interference of bystanders or family members and other professionals present in the scene, such as ethically problematic situations that can anticipate the patient’s transport to the hospital, aiming to preserve the safety of the team\(^{(11,14,17-18)}\).

A study on the quality of life of nurses in the Mobile Emergency Care Service (SAMU 192), carried out in a Brazilian state, points to the physical environment as an evaluated domain and driver of stressful conditions, anxiety, fear, and anxiety, which affect professional performance and favor the prioritization of care provided by the teams\(^{(25)}\).

Another study in Iran cites infectious diseases such as Ebola, H1N1, and coronavirus as factors that trigger dangerous conditions and interfere.
with the decision-making ethics of the prehospital team, causing anxiety and uncertainty among professionals(26). Nevertheless, in the scenario of street care, the violation of professional privacy has been identified as EP, which also compromises the professional practice of nurses(13). Therefore, an interactional relationship is required that involves the teams involved in the intervention and those who take over the management of the mobile units, intending to equate the guarantee of the safety of professionals and the defense of the user’s right to be attended in urgent situations and emergencies(11,13-14).

To this end, discussing the ethical issues involved in the MPHC scenario is necessary, considering that decision-making is a constant challenge for teams in this context. It is recommended that training be carried out among professionals that focus on difficult situations in clinical practice, with exposure to conflicts of values, principles, and duties, valuing the development of ethical sensitivity and harm reduction during care in the pre-hospital setting(7,12-13,18).

The exploration of the topic is a limitation of this study, considering only the professional category nurse, given the dimension of the phenomenon and the multidisciplinary performance in the MPHC scenario.

REFERENCES


CONCLUSION

Ethical issues that permeate the professional clinical practice of nurses in the context of MPHC have been identified. It is recognized that the adversities encountered in street-based care can lead to conflicts arising from the relationships established between the team, family, patients, and professionals involved in the outcomes of incidents. Moreover, external factors influencing care and institutional culture contribute to these challenges, highlighting the importance of early mitigation of ethical problems to ensure prudent and responsible decision-making. Therefore, it is recommended to undertake additional studies that address ethical issues as a source of decision-making strategies for nurses working in the mobile prehospital setting to provide immediate and safe ethical assistance.

CONFLICT OF INTEREST

The authors have declared that there is no conflict of interest.


22. Dourado JVL, Aguiar FAR, Lopes RE, Silva MAM, Ferreira Júnior AR. Ethical problems...


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<table>
<thead>
<tr>
<th>Project design: Oliveira SS, Pitzer CMT, Ferraz MOA, Lírio LKS, Santa Rosa DOS, Freitas KS, Souza EO</th>
</tr>
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<tbody>
<tr>
<td>Data collection: Oliveira SS, Pitzer CMT, Ferraz MOA, Lírio LKS, Santa Rosa DOS, Freitas KS</td>
</tr>
<tr>
<td>Data analysis and interpretation: Oliveira SS, Pitzer CMT, Ferraz MOA, Lírio LKS, Santa Rosa DOS, Freitas KS, Souza EO</td>
</tr>
<tr>
<td>Writing and/or critical review of the intellectual content: Oliveira SS, Pitzer CMT, Ferraz MOA, Lírio LKS, Santa Rosa DOS, Freitas KS, Souza EO</td>
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<tr>
<td>Final approval of the version to be published: Oliveira SS, Pitzer CMT, Ferraz MOA, Lírio LKS, Santa Rosa DOS, Souza EO</td>
</tr>
<tr>
<td>Responsibility for the text in ensuring the accuracy and completeness of any part of the paper: Oliveira SS, Pitzer CMT, Ferraz MOA, Lírio LKS</td>
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</tbody>
</table>

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