

Motivators and barriers to blood donation among university students: An integrative review protocol

Motivadores e barreiras à doação de sangue entre universitários: Um protocolo de revisão integrativa

Motivadores y barreras para la donación de sangre entre estudiantes universitarios: Un protocolo de revisión integrativa

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Abstract

Objective: To understand current scientific knowledge about the main motivators and barriers that influence university students in the decision to donate blood. **Introduction:** Although blood donation is essential for public health, donation rates often do not meet the necessary demand. College students are a potential group for donation campaigns because they are young and healthy. Understanding the factors that influence this population to donate blood can contribute to more effective blood collection and retention strategies. The research question that will guide the inclusion of studies was constructed by the PCC strategy, where P- population (students), C-concept (factors that influence blood donation) and C-context (higher education environments) : “What are the barriers and motivations for donating blood among students in higher education settings?” **Methods:** An integrative literature review will be conducted. Database research will be done in the Virtual Health Library (BVS), in the Scientific Electronic Library Online (SciELO) and in PubMed, as these are the databases with the highest indexing of health journals. **Results:** Results will be interpreted in light of the literature review and discussed in relation to existing theories on blood donation behavior and health communication. Based on the methodological procedures described, it is expected to obtain a series of results, products or processes that contribute to the advancement of knowledge on the subject, which could encourage the development of effective strategies to promote blood donation in this specific demographic group.

Keywords: Blood donation; College students; Integrative review protocol.

Resumo

Objetivo: Entender o conhecimento científico atual sobre os principais motivadores e barreiras que influenciam os universitários na decisão de doar sangue. **Embora a doação de sangue seja fundamental para a saúde pública, as taxas de doação muitas vezes não atendem à demanda necessária. Os universitários são um grupo potencial para campanhas de doação por serem jovens e saudáveis. Compreender os fatores que influenciam essa população a doar sangue pode contribuir para estratégias mais eficazes de captação e retenção. A questão da pesquisa que norteará a inclusão dos estudos foi construída pela estratégia PCC, onde P- população (estudantes), C-conceito (fatores que influenciam a doação de sangue) e C-contexto (ambientes de ensino superior): "Quais são as barreiras e motivações para a doação de sangue entre estudantes em ambientes de ensino superior?" Será realizada uma revisão integrativa de literatura, nas bases de dados da Biblioteca Virtual de Saúde (BVS), da Scientific Eletronic Library Online (SciELO) e na PubMed por se tratarem das bases que concentram maior grau de indexação de periódicos da área de saúde. Os resultados serão interpretados à luz da revisão da literatura e discutidos em relação às teorias existentes sobre comportamento de doação de sangue e comunicação em saúde. Com base nos procedimentos metodológicos descritos, espera-se obter uma série de resultados, produtos ou processos que contribuam para o avanço do conhecimento sobre o tema, que poderão fomentar o desenvolvimento de estratégias eficazes de promoção da doação de sangue nesse grupo demográfico específico.**

Palavras-chave: Doação de sangue; Estudante universitário; Protocolo de revisão integrativa.

Resumen

Objetivo: Comprender el conocimiento científico actual sobre los principales motivadores y barreras que influyen en los estudiantes universitarios en la decisión de donar sangre. Aunque la donación de sangre es esencial para la salud pública, las tasas de donación muchas veces no satisfacen la demanda necesaria. Los estudiantes universitarios son un grupo potencial para las campañas de donación porque son jóvenes y saludables. Comprender los factores que influyen en esta población para donar sangre puede contribuir a estrategias más efectivas de recolección y retención de sangre. La pregunta de investigación que guiará la inclusión de los estudios fue construida mediante la estrategia PCC, donde P-población (estudiantes), C-concepto (factores que influyen en la donación de sangre) y C-contexto (entornos de educación superior): “¿Qué Cuáles son las barreras y motivaciones para donar sangre entre estudiantes en entornos de educación superior? Tendra lugar una revisión integrativa de la literatura en las bases de datos de la Biblioteca Virtual en Salud (BVS), de la Biblioteca Científica Electrónica en Línea (Scielo) y en PubMed por ser estas las bases que concentran el mayor grado de indexación de publicaciones periódicas del área de la salud. Los resultados se interpretarán a la luz de la revisión de la literatura y se discutirán en relación con las teorías existentes sobre el comportamiento de donación de sangre y la comunicación sanitaria. Con base en los procedimientos metodológicos descritos, se espera obtener una serie de resultados, productos o procesos que contribuyan al avance del conocimiento sobre el tema, lo que podría incentivar el desarrollo de estrategias efectivas para promover la donación de sangre en este grupo demográfico específico.

Palabras clave: Donación de sangre; Estudiantes universitarios; Protocolo de revisión integrative.

1. Introdução

A doação de sangue é essencial para garantir o suprimento de sangue necessário para procedimentos médicos de urgência/emergência, cirurgias e tratamento de doenças com insuficiência permanente ou temporária da medula óssea (Yosef et al., 2021). Todos os anos, milhões de vidas são salvas por meio de transfusões de sangue (Casal-Otero et al., 2020). Com os avanços da medicina e o aumento da demanda por transfusões de sangue, é essencial garantir a estabilidade dos estoques de sangue. A doação voluntária de sangue é de suma importância nesse contexto (Ibidem, 2020; Dawadi et al., 2020).

A literatura médica tem se preocupado com formas de incentivar, atrair e reter doadores (Casal-Otero et al., 2020; Dawadi et al., 2020; Padilla-Garrido et al., 2021). A promoção da doação de sangue implica a necessidade de investigar os fatores que podem promovê-la ou inibi-la. Estudos descrevem os seguintes fatores como facilitadores da doação de sangue: solidariedade, satisfação de ajudar os outros, conscientização por meio de campanhas de doação, ter um parente ou amigo que precisou de transfusão, ter um parente ou amigo próximo que já doou sangue, ser do sexo masculino e viver em um ambiente urbano (Dawadi et al., 2020; Padilla-Garrido et al., 2021).

Ibidem (2021), em seu estudo, classificou alguns dos obstáculos à doação de sangue: (a) razões pessoais (como histórico médico anterior) ou preconceitos (pensamentos de que o sangue poderia ser comercializado); (b) medos, como medo da dor durante o procedimento de extração/agulha ou medo do ambiente hospitalar, medo de contrair uma doença ou infecção durante a doação, entre outros e (c) desculpas, como falta de tempo, falta de informação sobre o assunto, nunca ter pensado em doar e/ou nunca ter sido solicitado a doar (Padilla-Garrido et al., 2021). Outro estudo chegou a conclusões semelhantes, identificando que o nível de conhecimento e atitude em relação à doação de sangue varia de região para região com base na idade, gênero, residência, ano acadêmico, escolaridade dos pais e experiência em doação de sangue. Esse estudo destaca como principais barreiras: falta de informações sobre como e onde doar sangue, razões médicas, falta de tempo e medo da extração de sangue por um profissional de saúde não qualificado (Conner et al., 2013).

Os estudantes universitários representam uma população jovem e saudável com potencial para ser uma fonte significativa de doadores de sangue. Além disso, os estudantes universitários podem ser motivadores da prática, modelando e motivando outros jovens e estimulando as doações de sangue a longo prazo (Dawadi et al., 2020). A conscientização e a educação sobre a importância da doação entre os estudantes universitários são vitais para a criação de uma base sólida de doadores. Embora muitos estudos tenham investigado o tema, é necessária uma revisão integrativa para identificar, analisar e sintetizar os resultados

de estudos independentes. Nesse sentido, o objetivo deste estudo é compreender o conhecimento científico atual sobre os principais motivadores e barreiras que influenciam os estudantes universitários em sua decisão de doar sangue.

2. Methodology

Scientific methodology is necessary to ensure repeatability in study results and literature review is an important form of research that uses the scientific method (Pereira et al., 2018; Snyder, 2019). This is an integrative review protocol that seeks to synthesize knowledge and the applicability of the results of significant studies to practice and was prepared following the steps previously described (Souza et al., 2010). It was registered in the Open Science Framework with Digital Object Identifier (DOI 10.17605/OSF.IO/YB6FU).

2.1 Elaboration of the research question

The question of this review is: “What are the barriers and motivations for donating blood among students in higher education settings?” The research question was constructed according to the PCC strategy, where: P (Population) - students, C (Concept) - factors that influence blood donation; and C (Context) - higher education. The definition of eligibility criteria will follow the PCC acronym to answer the review question, where:

Population (P): Students - referring to young adults enrolled in a formal school or educational program, covering different fields of study and demographic characteristics.

Concept (C): Factors that influence blood donation, including both motivators (such as solidarity, influence of campaigns, and previous experience) and barriers (such as fear, lack of information, and logistical concerns) that impact the decision to donate blood.

Context (C): Scenario of blood donation among university students: refers to students in formal study environments, starting after high school.

This integrative review will consider articles published in any language, in the public and private domain, and with different methodological approaches, without language restrictions in the search for evidence. Texts and opinion articles will also be considered for inclusion in this scoping review.

Exclusion criteria: Duplicate studies, studies whose full text is not available, or documents that do not meet the inclusion criteria will be excluded.

2.2 Literature search or sampling

A broad and diverse database search will be carried out, including books, texts and electronic articles in the Virtual Health Library (VHL), the Scientific Electronic Library Online (SciELO) and Medline (via PubMed), as these are the databases with the highest level of indexing of health journals.

As a search strategy to find the studies in this review, we will use Medical Subject Headings (MeSH) in English and the association between Descritores em Ciências da Saúde (DeCS) in Portuguese to model the search string based on Boolean operators (Table 1).

Table 1 - Research strategy Databases searched, terms used and results found during the bibliographic review stage.

Database	Strategy
Pubmed	("Blood donation"[All Fields] OR "Blood donors"[All Fields]) AND ("student s"[All Fields] OR "students"[MeSH Terms] OR "students"[All Fields] OR "student"[All Fields] OR "students s"[All Fields])
BVS	((("Doação de sangue") OR ("Doador de sangue")) AND ((estudantes) OR (estudantes)))
Scielo	((("Blood donation") OR ("Blood donors"))) AND (students)
Total	

Source: Project Authors (2024).

2.3 Data Collection

The articles located in the searches will be transferred to the Rayyan Qatar Computing Research Institute software (Ouzzani et al., 2016) where duplicate articles will be excluded. The articles will then be initially screened by the study researchers independently and with the help of the Blind on Rayyan tool, allowing them to describe the reasons for the inclusion and exclusion of publications. Any conflicts in the choice of articles will be reviewed and discussed between the researchers. After the first selection, in which titles and abstracts were read, the studies will be read in full. The results of the search and the process of including studies will be reported in full and presented according to the PRISMA-ScR flowchart (Moher et al., 2009).

To synthesize the information, a data collection tool will be used to extract the title of the article, title of the journal, year of publication, author(s), place and type of study, sample size, motivators and barriers to donation and the study's main conclusions. The data will be extracted from the articles using a data extraction tool manually via a Google Sheets spreadsheet. The preliminary version of the extraction form (Chart 1) may be modified and revised as necessary during the data extraction process.

Chart 1 - Data extraction tool.

Number	Article title	Journal	Year publication	Author(s)	Place	Type of study	Sample size	Motivators	Barriers	Conclusions

Source: Project Authors (2024).

2.4 Critical analysis of included studies

Evidence classification systems will be used which are characterized hierarchically depending on the methodological approach adopted, where Level 1: evidence resulting from the meta-analysis of multiple randomized controlled clinical studies; Level 2: evidence obtained from individual studies with an experimental design; Level 3: evidence from quasi-experimental studies; Level 4: evidence from descriptive (non-experimental) studies or studies with a qualitative approach; Level 5: evidence from case or experience reports;- Level 6: evidence based on expert opinions (Souza et al., 2010).

3. Results and Discussion

A summary of major findings will be presented and discussed in line with the review objectives. A thematic analysis will be conducted to organize the data into categories, enabling a comprehensive understanding of the factors influencing blood donation behavior in this population. The steps of thematic analysis; familiarising with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing a report, will guide the process. (Thomas & Harden, 2008) Interpretation of themes and subthemes will continue within the review team resulting in the production of a thematic synthesis.

Then, the analysis of the articles will be compared with the theoretical framework and in relation to previous literature on blood donation behavior (Souza et al., 2010). This comparative approach will identify consistencies, divergences, and potential new insights.

The discussion will aim to bridge the identified gaps between theoretical knowledge and practical application, offering insights into strategies that can effectively promote blood donation within higher education settings. These strategies may include targeted awareness campaigns, the integration of blood donation education into academic curricula, and addressing logistical barriers to participation.

3.1 Presentation of the integrative review

The extracted data will be presented in the form of tables and charts and/or images, aligned with the objective of this review, in which it will be possible to compare all the selected studies and, therefore, identify patterns, differences and the sublocation of these topics as part of the general discussion (Souza et al., 2010).

4. Final Considerations

This integrative review protocol seeks to investigate the motivators and barriers to blood donation, aiming to identify knowledge gaps and establish priorities for future research. Additionally, it intends to provide practical implications and recommendations for research, education, practice, theory, and policy development in this field.

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Conflicts of interest

The authors declare that they have no conflicts of interest in this project.

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