

## Voluntary Blood Donation and Social Media

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The availability and safety of blood is an essential concern from public health perspective. Every single donation is a precious lifesaving gift and repeat donation is the key for building a safe and sustainable blood supply. In many countries, blood services face a challenge of sufficient availability of blood, while ensuring its quality and safety. A key component in assuring the safety and quality of blood transfusion is the collection of blood from voluntary, non-remunerated blood donors (VNRBDs). VNRBDs are regarded as the primary source of safest blood and blood products. Every year on June 14, there is a global celebration known as World Blood Donor Day (WBDD) to acknowledge and appreciate blood donors, who donate blood on voluntary, unpaid basis. WBDD offers a unique chance to increase public awareness of voluntary blood donation and foster its culture.

Each year, around 118.5 million donations of blood are collected worldwide. Developing nations frequently lack voluntary blood donations. For instance, 54 countries receive more than 50% of their blood demands from family members or Replacement donors, whereas 79 countries receive more than 90% of their blood demands

from voluntary unpaid blood donors.<sup>1</sup> In Pakistan, (a country of 220 million people), 2.7 million units of blood are collected annually, of which only 18% come from voluntary, unpaid blood donors, despite the fact that 60% of Pakistan's population is under the age of 29.<sup>2</sup> For these reasons, enhancing voluntary blood donations is essential to ensure a sufficient and sustainable supply of blood especially from first-time blood donors.

Social media is a prime option to be used for establishing blood donation networks because more and more individuals are spending time there. Considering the popularity of social media among young generation, the recruitment and motivation of blood donors through social media becomes more important. Social media has the capacity to significantly alter the attitudes, and it has become the mainstay of many public health initiatives.<sup>3</sup> A number of studies have shown the potential of social media as a tool for health intervention, attitude change and counselling, health campaigns, medical education, disease outbreak surveillance and health research.<sup>4</sup> Recent studies take into account how social media gives patients and healthcare professionals a chance to connect with each other, with a positive impact on current medical practices. Moreover, several studies have reported that social media charity campaigns have a direct positive effect on pro-social and altruistic behaviours.<sup>5,6</sup> Blood donation relies on public's willingness to donate

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**Cite this editorial:** Waheed U, Hosseini N. Social Media and Voluntary Blood Donation

. J Islamabad Med Dental Coll. 2023;12(2) 68-70

DOI: <https://doi.org/10.35787/jimdc.v12i2.1010>

blood voluntarily and without remuneration, so there is a constant need for fresh influx of donors to keep the donor pool steady.<sup>7,8</sup>

Role of social media for collecting blood from voluntary donors, and its use in recruiting and sustaining blood donors has grown. Latest studies have shown how social media may play a pivotal role to encourage blood donation attitudes. For example, a South African study revealed a favorable correlation between social media communication and blood donation knowledge, individual perceptions, perceptions of family and peer pressure, and donation intention.<sup>9</sup> Studies conducted in India<sup>10</sup> and Saudi Arabia<sup>11</sup> have reported the social media's potential as a tool to disseminate blood donation appeals. In Netherlands, recruitment via internet and social media in particular have emerged as the main strategies for Dutch donor attraction and retention.<sup>12</sup> According to a German survey, social media represents the main motivator for first-time donors and most significant reason to donate regularly.<sup>13</sup> Abassi et al.,<sup>10</sup> piloted a study on the use of Twitter to appeal for blood donations in India while Shah et al.,<sup>14</sup> reported the impact of e-mails, short text messages and social media in the enrollment of blood donors. Rodrigues et al.,<sup>15</sup> investigated the efficacy of the use of WhatsApp in Brazil, and Siromani recommended the use of Whatsapp as a means to motivate and recruit voluntary blood donors.<sup>16</sup> However, it remains uncertain what features of social media have better motivational outcome.

In Pakistan, during the COVID-19 pandemic, Waheed et al.,<sup>17</sup> conducted a study using WhatsApp as an effective tool for donor mobilization campaigns. The survey revealed that 56.34% of donors donated blood after receiving the blood bank's WhatsApp message, with a response rate of 31.6%. Moreover the high proportion of female donors who responded to the call was also encouraging, (as according to national data, only less than 5% of women donate

blood). It is pertinent to mention here that to attract the female blood donors, a renowned Pakistani filmmaker Ms. Sharmeen Obaid-Chinoy (double Oscar winner) was appointed as the 'Honorary Ambassador for Blood Safety' by the Government of Pakistan, while for the young donors, the National Health Ministry's Safe Blood Transfusion Programme signed an agreement, with the renowned international football star, Cristiano Ronaldo, to promote the culture of voluntary blood donations in Pakistan.

Facebook started developing a blood donation feature in 2018 with the goal of raising awareness of blood donation. According to a study from the USA, using Facebook blood donation feature, blood donations increased by 4.0% and donations from first-time donors by 18.9%.<sup>18</sup> A study from Pakistan<sup>19</sup> utilizing the same blood donation feature, demonstrated an improvement in the trend of voluntary blood donations, with 3-10 walk-in donors and an average of more than 20 phone calls per month (inquiring about voluntary blood donations) in each Regional Blood Centre. Currently, most of the present literature is related to donors, it is however deficient about non-donors. To address this gap National Health Ministry, Pakistan conducted a nationwide KAP survey<sup>21</sup> in collaboration with a consultant from Sanquin Consulting Services, Netherlands. The study, (including 49% non-donors), highlighted the fact that widespread misconceptions and fear for blood donation exists among non-donors. The study concluded that the role of internet and social media seems encouraging for such a public awareness campaigns. However extensive donor surveys are still required to give us important data on, shifts in attitudes towards blood donation and change in thoughts regarding blood donation both from donors and non-donors, using social media.

To conclude, in Pakistan, where there is a dearth of voluntary blood donors, social media can play a significant role to fill the communication gap between blood centers, donors, and hospitals.

Social media apps have an enormous potential to enhance donor recruitment and retention, and its impact must be investigated in future.

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