

Manuscript_ORGANIZING COMMUNITY PARTICIPATION IN VOLUNTARY BLOOD DONATION

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Organizing Community Participation In Humanitarian Blood Donation Activities

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ABSTRACT

Aim: to organize and to encourage community participation in humanitarian blood donation held by the Indonesian Red Cross in collaboration with local church

Discussion: the culture of voluntary blood donation must always be encourage, in order to guarantee timely access to safe blood and blood products and help save lives. Compliment and appreciation given to noble donation of voluntary donors who receive no remuneration but are always ready and available to donate blood to help save other lives most of whom they never meet. Using popular social media, action taken to promote, mobilize, and publish educational materials on voluntary blood donation campaigns as well as encourage local potential donor to donate voluntarily. This activity is also the implementation of the noble human values of sharing, giving and caring

Conclusion: connecting all stakeholders helps to make the blood donation succesfull

Keywords: Indonesian red cross, local church, scientific, social media, sharing, giving, caring, interprofessional

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30 **1. INTRODUCTION**

31

32 Per definition, blood donation is the condition when an individual voluntarily has blood drawn
33 and used for transfusions (directly) [1] or and/or made into biopharmaceutical medications
34 by a process called fractionation - separation of whole blood components into certain parts
35 needed (indirectly) [2]. Donation may be of whole blood, or of certain specific blood
36 components (apheresis).

37 Blood transfusion is actually a requisite factor of health care [4,5]. This method subsidizes to
38 prevent serious complication and even millions of death annually [6], in both routine
39 scheduled procedure [4,5] and emergency conditions [6,7]. Transfusion make possible
40 complex medical and surgical interventions by doing the perioperative blood management
41 [8] and dramatically improves the life expectancy and quality of life of patients with a variety
42 of acute and chronic conditions, e.g., pregnancy [9]

43 Adequate supplies of safe blood should be assured through regular, voluntary, unpaid
44 donations [10]. Regarding blood donation, participation was supposed to be voluntary and
45 restricted to highly motivated individuals who are willing to give their blood for free. In order
46 to be able to reach an ethnically diverse population [11], collection must be maintain to every
47 level of society, including religion based community, e.g church congregation. It is necessary
48 to perform correct strategies in order to obtain community collaboration and participation in
49 blood donation.

50 Various strategies regarding community participation have been reported elsewhere
51 previously, and one of them is the application of information and communication
52 technologies which is extremely common nowadays [12]. The aim of this short
53 communication is to reveal our effort to encourage the community participation and
54 collaboration to support the blood donation using popular social media.

55

56 **2. APPROACH TO ESTABLISH BLOOD DONATION EVENT**

57

58 This blood donation event is actually a local church's annual agenda; as part of the
59 community, they want to support the national programme of The Indonesian Red Cross
60 Society (Indonesian: *Palang Merah Indonesia*), a humanitarian organization in Indonesia. It
61 is a member of International Federation of Red Cross and Red Crescent Societies. Basically,
62 the importance of blood availability requires The Indonesian Red Cross to always maintain
63 the availability of blood to meet the need for blood transfusion; and the primary source
64 always come from volunteer donor [3].

65 This event organized by collaboration of the Youth commission (Indonesian: *komisi Pemuda*)
66 with Gentlemen commission (Indonesian: *komisi Pria*) of local church named *Gereja Bethel*
67 *Indonesia "Shalom"* located in Tanjung Priok, North Jakarta with full support from the faculty
68 of Medicine, Universitas Kristen Indonesia (FK UKI), Jakarta-Indonesia and the Indonesian
69 Red Cross as the main implementer. The blood donation event was planned since the end of
70 the year 2022 and the implementation date is october 22nd 2023. Through this event, it is
71 hoped that blood will be obtained from prospective volunteer donors who come from
72 congregation members and community members who live around the church area.

73 We divided our approach into three stages: (1) preparation, (2) implementation and (3) post
74 implementation evaluation.

75

76 **2.1 Preparation**

77 A small advanced team has been formed since the beginning of the year, with the task of
78 tracing database on previous activities. This team manage each individual as potential
79 donor, greet them and remind them about the event being held, and they conduct it in
80 regular base.

81 Beside the option to personally approach the potential donor, the team also use the power of
82 social media. The main aim is to attract and preserve new potential donors through social
83 media by creating positive materials that is appropriate, attractive, and encouraging. The
84 team urge to showcase nonprofit's mission, vision, values, and impact in a way that inspires
85 and educates the audience.

86 In order to adjust to the audience, the team also be obliged to apply various different content
87 formats and trends to appeal to different preferences and platforms, because in the church
88 congregation group alone, the audience divided into parents, young adults and youth. Using
89 social media, user-generated content apply to showcase the noble intention of this
90 nonprofit's work and also mention the achievements in previous blood donation. The
91 advanced team also utilize the combination of a mix between emotional and rational
92 appeals, as well as a clear call to action, to motivate all the audience to donate their blood or
93 support the event.

94 While regularly inform and update the potential donor, The team began to create a data
95 collection system for potential donors using simple Google form™ which contains simple
96 demographic data as well as information on blood type and history of previous blood
97 donations. With the existence of this data, it is hoped that it will be easier to integrate it with
98 the Red Cross data fields that must be filled in before donating blood.

99 Registrants who include their WhatsApp number, are greeted regularly with content that
100 varies from reminding them of the implementation date, preparations that prospective donors
101 need to make, the benefits of donating blood, who will be helped by the blood and conditions
102 that make it impossible to donate blood.

103 **2.2 Implementation**

104 The night before the activity, a coordination meeting was held. Data collected from G form
105 recorded 120+ potential donors. Once again for the last time, all potential donors being
106 encouraged to prepare themselves for the event in the following day. The local team
107 prepares the entire venue where the activity will be carried out, which is broadly divided into
108 two areas, namely the outdoor area for re-registration (controlled by the local committee)
109 and the donor area, a large comfortable room with 6 folding bed (managed by thr the red
110 cross team)

111 Local teams have gathered since 7.00 AM. After short briefing, 2 people were assigned to
112 serve at the registration desk, several people served in the blood donor room to stand by
113 waiting for orders from Red Cross officers and several more people served at the exit of the
114 donor room. Re-registration starts at 8 o'clock and closes promptly at 11 o'clock and from
115 there the activity is completely finished after all registrants are re-registered electronically by
116 the Red Cross team then checked for Haemoglobin level and blood type and finally a quick
117 physical examination is carried out by the Red Cross doctor who will finally decide whether
118 the candidate can donate his/her blood or not.

119

120 **2.3 Post Implementation Evaluation**

121 From 100+ individuals registered in local team notes previously, 73 individuals managed to
122 re-registered and after screening 57 individuals (32 males and 25 females) successfully
123 donated his/her blood which blood type consist of all blood type and their data presented in
124 table 1.

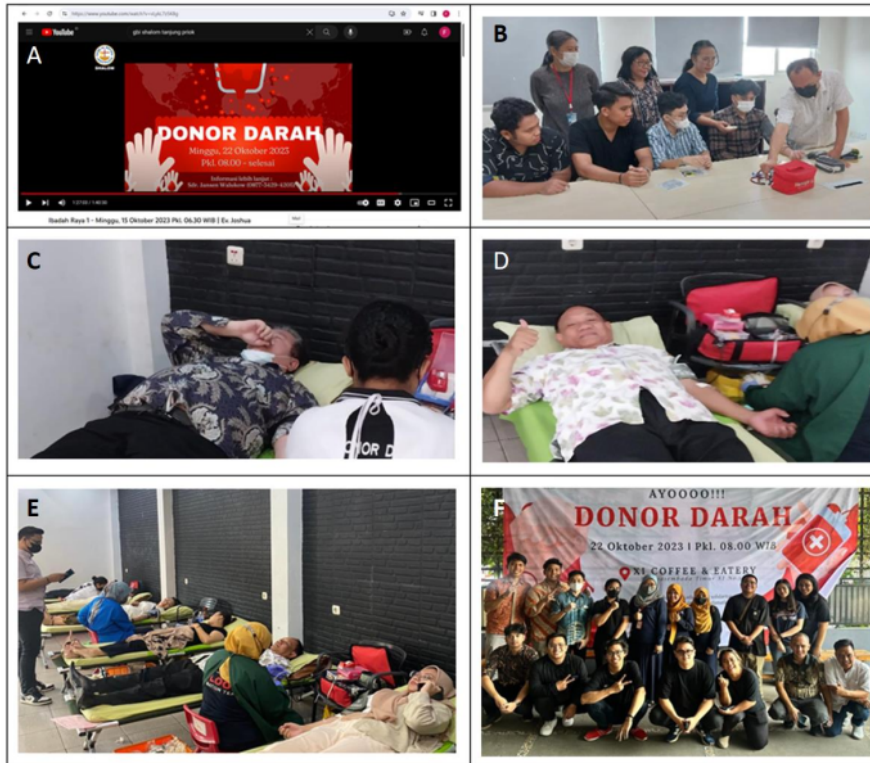
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Table 1. Distribution of blood type

No	Blood Type	Frequency	%
1	A	10	17.54%
2	B	17	29.82%
3	AB	2	3.5%
4	O	28	49.12%
Total		57	100%

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None of the 57 donors complained of adverse effects from blood donation such as dizziness, nausea, vomiting, swelling at the needle entry site, fainting or prolonged bleeding.



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Fig 1. (A) Screenshots from YouTube™ that record and broadcast church Sunday services in the weeks before the donation event - announcing that blood donations will be held, (B) briefing and perception equalization between faculty member prior the event, (C) anxious potential donors who are being accompanied and reassured, (D) a 60 years old veterans with previous history of 150+ blood donation since the year 1980, (E) All 6 folding beds prepared by the Red Cross team were filled with enthusiastic donors, (F) the local church team took photos with the red cross team after the event

3. SCIENTIFIC APPROACH TO ENSURE SUCCESSFUL BLOOD DONATION

143 In market place, typical Customer relationship management (CRM) handled very carefully
 144 starting from good handling of database [13]. In case of Blood donation, as a vital part of
 145 worldwide healthcare, this activity began with previous donor database, careful assessment
 146 regarding donor eligibility and selection, adverse effects of donation, pathogen reduction and
 147 appropriate inactivation for donated blood. These complex chained activity highlights the role
 148 of the interprofessional team in ensuring appropriate protocol is followed [10].
 149 In our experience, we started with our own donor database collected from blood donation
 150 activities in previous years. We filtered them based on (1) whether they are members of the
 151 church or non-church member (member of the community live around the church), (2) can
 152 they still be contacted and (3) what is the response after being contacted and explained
 153 about the coming blood donation activity. Those who respond after being contacted via
 154 social media are included in the potential donor category. These people are then contacted
 155 more regularly about topics related to blood donation, for example the purpose and benefits,
 156 how to collect it, the amount of blood donated, and adverse effects, conveyed in text
 157 messages or short videos. Every week after the Sunday service and community service
 158 messages related to donors were broadcasted, followed by the distribution an electronic link
 159 (Google based registration form). Registrants were monitored weekly, and for the new ones,
 160 their data is entered as an addition to the existing database.
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162 Actually, it is become a common practice nowadays, that in general, social media thru
 163 Internet-connected smart phones utilized maximally in every aspects of promoting,
 164 motivating, recruiting and even retaining blood donors [12,14,15]. According to Semaldi [15],
 165 donor motivation consist of three stage of development, which can be seen in figure 1.
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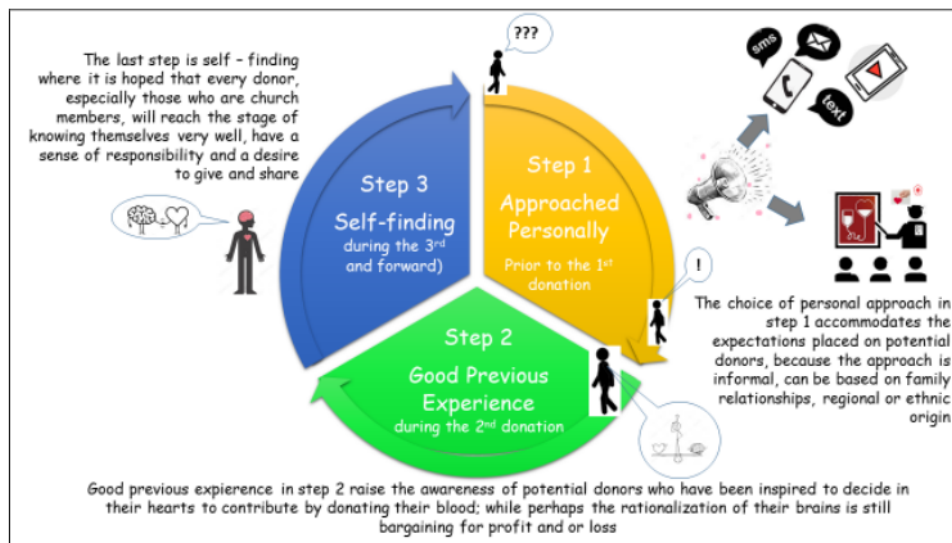


Fig. 1. Three steps of change in motivation in donating blood

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Simple approaches such as sending text messages, e.g., SMS or popular short message service such as WhatsApp chats) [16,17], radio or television advertisement [18], short video [17] or using ringtones [19] in many regions of the world have proven effective for marketing and promoting blood donation [16]. Principally, the focus of this noble campaign is to disseminate information on the social value and clinical need for blood donation [10,15].

177 Several countries on different continents, e.g., sub-Saharan Africa [20], Bangladesh [21],
178 Brazil, India and the USA [22], which also report similar things with obstacles that are more
179 local in nature.

180 In other study conducted by Daroedono et al [23] revealed that due to COVID-19, there is
181 now a more massive shift in the way of health communication delivered from traditional
182 platform into social media. Extensive social media leveraging support health care
183 professional or other stake holder with good equipments to disseminate information, to
184 challenge health care policy or any practice issues, to improve health behaviors (personally
185 or communally), to keep engage with the community, and to educate and interact with
186 patients, caregivers, students, and colleagues [24]. Social media have the potency to
187 improve health outcomes, develop a professional network, add personal awareness of news
188 and discoveries, motivate patients or the community, and provide health information to all
189 stakeholders [25].

190 In a more specific insight, the exigency and raising application of electronic/digital based
191 collaborative platforms means that they could become a very useful tool for encouraging
192 blood donation [26], especially among millenials and gen Z sub populations [27]. A very
193 good example of this which was mentioned previously called BLOODR application [28], a
194 blood-donor web application, a platform that contain not only educational materials regarding
195 blood donation, but also encourages promotion among its wide spread users. this approach
196 allows the emergence of a vigilant and alert digital community with a good understanding of
197 the importance of blood for those in need [12].

198

199 **4. CONCLUSION**

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201 Despite barriers in blood donation, including previous negative experience and perhaps also
202 fear due to lack of information, our sharing of experiece revealed that with good initial
203 personal approach, followed by reminding potential donors about the beauty of sharing until
204 they achieve their own self-finding in humanity act infact can encourage and build positive
205 motivation for potential individual to donate their blood.

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209

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211 implement blood donation programme

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216 **COMPETING INTERESTS**

217

218 "Author have declared that no competing interests exist."

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220 **AUTHORS' CONTRIBUTIONS**

221

222 Author YHD and LSS designed the study, TS and RL performed the literature study, author
223 MNS, JYP, HT and DJS implement the blood donation. Author YHD, LSS, TS and RL wrote
224 the first draft of the manuscript.

225

226 **CONSENT**

227

228 Not needed

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231 **ETHICAL APPROVAL**

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233 Not needed

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