Organ Donation: The Power of Social Media to Save Lives

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PASS WITH DISTINCTION

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ABSTRACT

Three people die every day waiting for an organ transplant \([1]\). Diagnosis and treatment of patients requiring organ transplantation is operated through the National Health Service (NHS). In this paper we consider reasons for the low rate of sign up to the organ donor register in the UK as opposed to some other countries having significantly higher rates. The NHS uses a range of methods to recruit prospective donors. One way in particular is the use of social media such as Facebook and Twitter. Social media is used by a wide range of people and in this paper we will discuss the current donor recruitment methods used and suggest future developments to increase registered donors. Through current research conducted by ourselves and others, we believe it is evident that social media will contribute significantly to increasing the number of potential organ donors. Although there are some disadvantages with using social media, we believe that despite the drawbacks it will be a worthwhile investment for the NHS.

INTRODUCTION

“Social media is the future of communication, a countless array of internet based tools and platforms that increase and enhance the sharing of information.” \([2]\) It includes well known platforms such as Facebook, Twitter, Instagram, YouTube and Google Plus where information can be posted and shared by users in a variety of forms including text, image and video. Social media is used not just as a way to share personal information but also to receive information regarding various subjects of interest. It allows people to share life stories, read news, communicate with others and ask questions.

Social media allows organisations to inform users of their products/services; the NHS is able to use this to inform people of organ donation. Since it is easily accessible for patients it allows them to find out about current issues arising in the medical field therefore making it a useful tool for the NHS to use. Many people act on information provided e.g. someone may book an appointment for a flu vaccination that they had found out about through social media. Many also use sites such as Yahoo! Answers to ask others for advice e.g. someone may have questions regarding surgery. This shows that social media is significant to medicine, providing people the information they require, as well as allowing them to help others by sharing their knowledge and personal experiences.

In order to discuss the power of social media in the recruitment of organ donors one must first understand the principles of the NHS procedure of organ transplantation. The process of organ transplantation requires the collaboration of a team of doctors, consultants, transplant co-ordinators and the family of the potential organ donor. Firstly, the potential donor has to be
declared brain dead which usually takes place in the Intensive Care Unit. The Intensive Care Unit Doctor and the Consultant carry out Brain Stem Death tests, \(^3\) (shown in Figure 1) and the relatives are informed of the patient’s death. \(^4\)

![Angiogram of a brain with and without blood flow](image)

Figure 1: This photo illustration shows an angiogram of a brain, on the left with blood flow and on the right without blood flow as it would be seen in a brain dead patient.

At this stage the Transplant Co-ordinators are informed and they will meet with the patient’s relatives to discuss organ donation. The Transplant Co-coordinator then requires the relative’s consent for the transplant to occur even if the patient is on the registry. If the patient was not on the donor register then the relatives are asked if the patient had considered donating \(^5\). If consent is obtained, medical tests are carried out and perfusion and preservation of the organs can occur and the organs can be removed from the body successively \(^6\). During this procedure, the blood, lymph node and spleen samples are sent to the tissue typing laboratories for HLA typing \(^7\) and then a matching run is conducted by Organ Donation Team to match the donor to a given patient.

**CURRENT USE OF SOCIAL MEDIA BY THE NHS**

The NHS recognizes the great potential of social media and is currently deploying several methods to appeal for organ donors.

a.) The NHS has a Facebook page: ‘NHS Organ Donation Campaign’. Information is regularly posted on this page regarding organ donation and campaigns the NHS is launching.
The current number of ‘likes’ (as of 12/07/14) is 114,915[8] which looks like a successful number; however when contrasted with the current UK Facebook users of 24 million; it is less than 5% of the population on Facebook. Less than 2% of the UK population of 63.23 million is aware and supporting organ donation on Facebook, suggesting this method of recruitment isn’t successfully deployed.

b.) A Facebook application called ‘Transplant Week Facebook App’ [9] has been launched by the NHS. This is an application that shares people’s personal stories about organ transplants, photo’s that people have posted of themselves joining the registry and links to the registration page as well as other ways that people can get involved in raising money for transplant week. It is supported by well-known charities including the National Kidney Federation and the Transplant Support Network. It has also resulted in parliamentary support of the campaign and support from celebrities such as Beth Tweddle and Boris Johnson. However this was only recently launched in July 2014 for transplant week and the results cannot yet be assessed.

c.) There is a section on organ donation on the NHS website where the majority of information regarding donations is provided however many people are not aware of the site suggesting the NHS could further develop this method.

d.) A YouTube video was launched by ‘NHS Organ Donation’ in 2009 but there are only 88 subscribers to the NHS’ channel. There have been 32,119 views (as of 19/08/14) and the fact the NHS has only uploaded 5 videos on this site suggested it has not been a success and could also be improved [10].

In spite of the NHS’ effort to use social media, there are further improvements that can be made to increase the number of registered organ donors. There are currently 20, 565, 792 people on the organ donor register (as of 19/08/14) with 4,648 successful transplants between 2013/14 [11] however this is not sufficient for the current waiting list. The gap between the
number of organ transplants and those on the waiting list is narrowing but there are still a significant number of people who cannot find a matching donor (Figure 2).

![Transplants Vs People on the Waiting List](image)

**Figure 2**

**RELEVANCE TO MEDICINE**

Organ transplants are important in medicine; they are a more cost effective way of treatment than some of the other methods carried out therefore the savings the NHS makes through more transplants would allow the money to be used in other fields of medicine such as medical research, drug and treatment development and organ rejection research. The average cost of maintaining a patient with kidney failure on dialysis is £31,000 per year whereas the transplantation of a new kidney costs approximately £55,000 \(^{12}\). Although the cost of the transplant compared to dialysis in the short term is more expensive there is a substantial benefit in the long term. Successful social media campaigns should explain this to the general public and demonstrate the complexities arising from this matter. An increased number of transplants would benefit the NHS hugely allowing savings to be made that could be of benefit for development and research in other areas of medicine.

Transplantations rather than alternative treatments for patients also provide a better quality of life and healthy organs. Also other treatments like implantable cardioverter defibrillators and pacemakers can only improve a patient’s quality of life to some extent and there are lower survival rates. Increasing number of organ donors is important for the NHS in providing healthcare and allowing more patients to live comfortably.
With more transplants occurring more patients are provided healthy organs therefore survive longer. At 85.5%, the 5-year survival rate for transplant patients is more than double the 35.8% survival rate for dialysis patients. [13] From Figure 3 it is clear that transplants are more successful in terms of patient survival therefore more effort should be made into encouraging donations.

![Patient Survival Rates by Dialysis and Transplant](image)

Figure 3

There is an opportunity here to transparently communicate these developments by using social media like Twitter or blogging platforms. This will also serve to improve public perception of the NHS as it is funded by tax payer’s money, donations, charities and volunteering. The NHS can gather feedback and measure patient satisfaction through the use of social media.

**DISCUSSION**

Through our research as well analysis of figures and sources representing organ donor numbers and population numbers it is clear the current methods for donor recruitment used by the NHS are not being used to their maximum effectiveness. We believe that the NHS could improve their recruitment methods and increase the number of organ donors significantly, particularly due to the notably high difference in the ratio of those who support organ donation compared with those who have joined the registry. This is further illustrated by Figure 4, showing that although 96% of people believe in organ donation only 30% of these have become donors.
One may wonder how social media can be used to maximise the number of people on the Organ Donor Registry. It is evident that social media is an important tool for spreading awareness of healthcare issues. A study conducted on a group of 6th form students by ourselves showed that only 18% of participants were on the Organ Donor Register with many lacking knowledge of this subject; one person commented, “I thought I had to be 18 to donate.” We suggest a target audience for the NHS to be the younger generation (aged between 16 and 25), these are people of age to donate who haven’t had the opportunity to consider organ donating in as much depth as others. 30% of people already on the Organ Donor Registry are aged between 16 and 25 [14] and we believe the NHS could increase this percentage as younger people spend vast amounts of time on social networking sites like Facebook. An appeal launched through these will allow thousands of teenagers to become aware of the Donor Registry. A recent campaign in Scotland launched in February 2013 to appeal for more young people to become blood donors [15] was successful recruiting over 5,000 new blood donors. This could be adopted by the NHS for appealing to younger people to become donors through the use of social media. A suggestion would be for the NHS to advertise on applications such as games frequently used by younger people and social networking sites like Twitter.

The NHS’ use of Facebook could potentially be adapted to increase the number of people on the Organ Donor Registry. The ‘No Make-up Selfie launched by Cancer Research UK was a success this year (2014) having raised £8 million as well as spreading awareness to millions of Facebook users [16]. A similar approach was used when over 200 girls were kidnapped in
Nigeria, celebrities such as Cara Delevingne posted photos holding ‘Bring Back Our Girls!’ signs (Figure 5 and 6), on various networking sites. This was successful in spreading awareness with many Facebook and Twitter users following this example.

People are constantly following the trends of celebrities due to their associations. Celebrities are in many films and music videos that millions of people watch and admire. When a celebrity posts something on Twitter people pay more attention than if it was someone of whom they had not heard. Many organizations take advantage of this and use celebrity endorsement since people are more easily persuaded to purchase a product or use a service due to celebrity association. The NHS could therefore recruit celebrities for their social media campaigns to encourage people to join the organ donor registry. Celebrities’ Facebook and Twitter sites could be an excellent tool for the NHS organ donor social media campaign since many people would see their posts about the importance of organ donation to saving lives. As demonstrated by Crutchfield (2010); consumers buy into celebrities which is what makes them effective in advertising \[17\]. The NHS could also recruit celebrities to join the registry by posting a ‘selfie’ with their Organ Donor Card to start a chain of people posting their own ‘selfies’ with captions such as "Become an organ donor and post a selfie with your donor card."

Figure 5  

Figure 6

Another potential method for the NHS campaigns involves creating and launching an advert on various social medias with celebrities who have come together to support organ donation. This has been done previously with disease awareness advertisements such as the development
of cancer due to smoking (Figure 7). Using this proven method could increase the UK's awareness of the urgent need for organ donors and encourage more people to join the registry.

Figure 7

Results of our research prove that many patients are not joining the NHS Organ Donor Registry because they are not well informed. One respondent to our questionnaire commented “I would have become a donor however I have not been approached by my doctor about this topic.” The most common answer as to where they had seen organ donation before were television adverts and through family members. They were unaware that social media was being used as a method to recruit donors. 92% had limited knowledge of how to become an organ donor. 75% had not considered becoming donors, yet would join the registry if they had known about it. A potential solution for the NHS is to provide information about becoming a donor by launching a video via social media. A 30 to 60 second attention grabbing advertisement could be effective in encouraging people to join the organ donor registry. The NHS could include an 'It takes 15 seconds to join' tutorial showing someone on the website clicking the 'Become a Donor" button and filling out the details on the form. It would show people how easy it is and how little time it takes to join. This could be used for YouTube advertisements or on the Facebook News Feed (Figure 8). It would help the NHS to inform people about organ donation, encourage them to join the register and therefore potentially increase the number of transplants and save more lives through the use of social media.
In July 2013 the ‘Donate Life Concert’ was held in Sheffield to promote organ donation. It used the Facebook site to promote the event in that area [18]. It proved to be a success attracting an audience of 2,200 [19]. More concerts could be held in the future with the NHS providing information regarding these events on various websites like Twitter and Facebook. This would result in more people joining the registry and ultimately resulting in more organs available for transplantation.

As well as using social media directly by the NHS other sources could potentially be used for spreading information about organ donation such as blogging websites e. g. medical students setting up blogs to post the latest news about organ donation. There has already been a blog set up called 'The Blood Blog,' to give information about blood donation and investigate why people do not give blood [20]. This idea could be extended to organ donation by providing a specific blog and using it to provide information that is easy to access via internet. This infers that through a blog more people will be informed about organ donation and more people signing up to the organ donor register, saving more lives.

Social media would also make an excellent research tool for the NHS because it is a ‘two way stream’ allowing not only for the NHS to inform the general public but also to gather feedback on this matter. A site such as Facebook allows people to give their own suggestions, comments and feedback to how the NHS could improve the transplant process and increase the number of donors. Also the NHS can learn why the majority of the UK population are not on the
organ donor registry. A page on the NHS Facebook site could have a section where families share their experiences of becoming donors or how organs saved their loved ones lives. The NHS could also see what their patients think of the ‘opt out’ system: “every person living in that country is deemed to have given their consent to organ donation unless they have specifically "opted out" by recording in writing their unwillingness to give organs.” [21]. This system is successful in countries such as Spain. Through the use of this social media the NHS could also understand the public’s opinions regarding ethical and religious views on organ donation making it a useful research tool for development of organ donation

ETHICAL ISSUES

It is inevitable that there will be ethical issues surrounding organ donation, some people have reasons they do not want to be donors whilst others join the donor registry due to misleading information or do not let their families know of their wishes.

One of the ethical issues is that the family still have to give permission for their relative to donate even if they are on the register. “4 in 10 families said no to allow their loved ones organs to be donated, even in cases where the person was on the organ donation register.” [22] The relatives that refuse often say that they want to arrange funeral procedures for their loved one and are still in mourning [23]. This is a problem for the NHS and the Blood and Transplant Service because it means they receive fewer organs due to family withdrawal from the programme. To help with this, social media campaigns should include how potential donors can inform their families of their wishes to donate their organs.

There may also be some religious concerns for certain groups of people about organ donating as certain religions do not allow it e.g. Jehovah Witnesses. The NHS is aware of these beliefs and is treating these religions with full respect [24]. An ethical problem may arise from campaigns launched through social media as those who are unable to donate due to religion may feel offended by these advertisements.

Another issue with using social media to recruit donors is people believing that the campaigns employ emotional blackmail. Most adverts use emotive marketing [25] via personal stories or use vulnerable figures such as children in their advertisements causing the target audience to act on their emotions. However some advertising agencies can push emotive marketing too far to get people to buy their product or use their service. NHS campaigns do use emotive marketing by using personal stories of people that have organ transplants and some people may develop a
negative perception of organ donating therefore do not sign up to the registry. On a larger scale the number of people signing up could potentially decrease, adding to the shortage of organs.

The general public may also be discouraged from becoming an organ donor due to negative perceptions of this process [26]. The negative aspects of organ donation include organ trafficking and people worrying that the medical professionals will not try to save their lives if they are in critical condition because they are donors. This is false information because the doctors who help those in critical condition are not involved in the organ transplant process. Since social media is broadly available it can be used in a negative way e.g. to facilitate organ trafficking like in some less developed countries in the world such as in India.

Because organ donation is a relatively new development there will always be ethical concerns however the NHS should also be able to resolve this issue through social media.

CONCLUSION

There are many possible methods for the NHS to increase the number of organ donors through social media and indeed in other mediums. Some of the methods we have outlined in this paper are currently being used in other countries across Europe and the world. However the proposals we have offered are not being used by the NHS or could be used more effectively to promote organ donation. The methods presented in this paper can be adopted by the NHS to increase the effectiveness of some of their current campaigns but most importantly use new solutions to increase potential organ donors and save lives.

Use of social media will inevitably bring some disadvantages such as the cost of these campaigns. The use of these methods will require some investment from the NHS budget in development of social media campaigns. This is a challenge inherent to many of the campaigns that the NHS will set out to launch in order to achieve a higher number of potential organ donors. It must be acknowledged as being unavoidable and a valuable long term investment as increasing treatment via transplantation offers savings over other methods of treatment.

There may be some ethical concerns raised by certain groups however adequate use of social media can serve as an excellent platform to publicly discuss these issues and lead to mutual agreement in the future.
To conclude, we believe that there are significant benefits of using social media as a tool to recruit prospective organ donors. It will encourage more people to join the Organ Donor Register, leading to more transplants and more lives saved.

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