### Title:

Dating and intimate relationships of women with below-knee amputation: an exploratory study.

## Abstract:

*Purpose*: This study investigates experiences of dating and intimate relationships amongst women who use a below-knee prosthesis.

*Method*: 4 women took part in semi-structured online interviews. Transcripts were subject to Interpretative Phenomenological Analysis (IPA).

Results: 5 themes were identified: Revealing and Exposing: Disclosing the Amputation and Prosthesis; Judging and Judged: Internal Fears and Self- Doubt; Trusting and Accepting: Good Guy/ Bad Guy Elimination; Taking it Further: The Need for Depth and Realisation: Accepting and Feeling Accepted. Participants described how, despite negative feelings towards their appearance and body image, they chose not to conceal their prosthesis when dating. Rather, it was used as a means of screening potential partners in their search for deep and meaningful relationships. Realising that others were not prejudiced towards people who use a prosthetic had helped them become more comfortable with their own prosthesis.

Conclusion: These findings suggest that facilitating contact with other below-knee amputees and, in some cases specialist support, could help those who are struggling with the challenges they face regarding dating and intimate relationships. They also highlight the need for researchers and clinicians to give more attention to these important aspects of amputees' lives.

### Introduction.

Amputation of a limb is most commonly carried out as a result of cancer, congenital deficiency, trauma or inadequate blood flow [1]. Much of the existing research involving people who have undergone amputation has been conducted in the US and UK. In the US alone it's estimated that approximately 1.6 million people are living with limb loss; 30,000 to 40,000 amputations take place annually, and this number is projected to at least double by 2050 [2]. In the UK, almost 5,000 new referrals were made to prosthetic service centres between 2006 and 2007 [3] and, as of 2002, it was estimated that more than 62,000 people in the UK were using an artificial limb after amputation, with lower limb amputees accounting for approximately 90% of new referrals [3].

People who are living with an amputation in Western societies are doing so in an environment that seems increasingly focused on the pursuit of "the body beautiful", which narrows notions of beauty and the acceptable physical form [4] and where messages linking physical attractiveness and happiness are pervasive [5]. In recent years, advances in technology have led to the development of prosthetic limbs with more natural shape, size and movement [6]. These potentially improve amputees' ability to fit societal norms since, as well as aiding function, a prosthesis can also conceal the loss of a limb and thereby be seen as a means of attempting to manage the challenge of looking "different" and of feeling judged or vulnerable when under scrutiny by others [7,8].

Upper-limb and lower-limb amputations can have different emotional and physical implications. Lower-limb amputations are classified as either above- or below-knee: the knee joint allows below-knee amputees more flexibility and natural movement, whereas

above-knee amputations are more difficult to conceal due to the rigidity of the joint [9]. It has been suggested that below-knee amputees may draw more comparisons between themselves and able-bodied individuals due to the reduced noticeability and increased functionality of their limb loss and prosthesis [10], and some lower limb amputees have reported feeling unaccepted by other amputees because their limb loss is not so evident [8].

Much of the available research into amputation and prosthetic use has been concerned with advances in technology, and on physical wellbeing [11, 12]. Yet the impact of amputation is much broader than physical functioning (for example, effects on body image and psychosocial adjustment [13-15]. Furthermore, Nauert [16] notes that much of the limited research into experiences of living with an amputation has focused on male participants, reflecting the higher incidence of amputation amongst men than women [17-19]. Women with disabilities, such as those with amputations, often report feeling stigmatized and consistently under pressure to conform to society's idea of the conventional woman, and stereotypical notions of female physique and beauty [9, 20]. It has been suggested that recreating a 'feminine' body image is a priority for female amputees [17] and this is supported by vivid accounts [21, 22] that illustrate the significance of femininity, clothing choices, gender and embodiment for many women who are looking to restore a sense of 'normalcy' after amputation.

One aspect of life in which issues of body image and appearance can be especially pertinent (especially for younger people [23]) is the pursuit, development and maintenance of romantic and intimate relationships. However, relatively little research has examined the impact of amputation on these aspects of people's lives [1] despite a small number of studies showing that marital breakdown and relationship strain are both common post-amputation [24]. Male amputees have reported greater success than females in maintaining their relationships, whilst women more commonly report losing their significant other [24].

The possible difficulty in starting a new intimate relationship after amputation and the need for more research in this area has been highlighted previously [1], but little research has examined this issue in detail. Murray [8] notes that, in the early stages of a relationship, concealment may allow a potential partner to see the amputee for who they are rather than define them by the amputation. However, whilst concealment could be considered beneficial when looking to establish a new relationship, it may become a source of anxiety as the amputee must decide how and when to 'reveal' the amputation and prosthesis and, in the meantime, may feel as if they are deceiving their new partner which may cause feelings of unease [8].

Most studies involving those with limb loss include a more mature age group, a vast majority of whom are married at the time of amputation [25]. For example, all but one of the men with an upper limb prosthesis in Saradjian et al's [19] study were married or co-habiting. It seems that the experiences of young, single women have still received very little consideration.

In summary, there has been a relative dearth of research into female below-knee amputees' experiences of romantic and sexual relationships [8]. The current study therefore set out to gain an in-depth understanding of the experiences and emotional responses of women with below-knee amputations to dating and intimate relationships.

## Method

## <u>Design</u>

To date, most studies in this area have been quantitative [18, 26, 27], and although these have been instrumental in progressing our current understanding of the psychosocial impact of amputation, they have lacked the in-depth understanding that can be extracted from a qualitative approach [28]. A qualitative phenomenological approach was therefore deemed

most appropriate due to the lack of previous research in this area and the desire to gain a unique insight into individuals' experiences of a potentially sensitive topic.

Semi structured interviews were conducted so that participants could discuss their views and experiences freely. An interview schedule was developed, informed by the available literature and the first author's own experience of being a 23 year old below-knee amputee. The schedule started with the participant's experiences prior to their amputation and then explored their own journey when they started, or considered starting, dating. Questions such as "How do you find telling people about your prosthesis?" were phrased so as to be as open as possible, so that the participants realised the area of interest but were able to determine the direction of the interview [29]. The more traditional approach of conducting face-to-face interviews was replaced by the use of MSN instant messenger online which enabled participants from a wide geographical area to be recruited.

#### Recruitment procedure

The study was promoted through Facebook groups targeted at amputees (e.g. Amputees in Action and A Step Ahead), with the permission and help of site administrators. Women who were interested in taking part contacted the first author via email, who then sent them an information sheet and answered any questions they had about the study. A mutually convenient time to conduct an interview via MSN instant messenger was agreed, and a consent form was sent to each participant for their completion and return prior to the interview taking place. Each interview lasted approximately one hour, and was conducted by the first author with whom there had been no previous relationship aside from the email contact for this study.

All necessary ethics approvals were obtained and due to the online nature of the interview,, additional ethical guidelines [30] were adhered to.

## **Participants**

Any woman over the age of 18 with a below-knee amputation and the ability to take part in an online interview conducted in English was eligible to participate.

Four women met the entry criteria and were interviewed:

- Lisan is 18 years old from Jamaica and suffered from an osteogenic sarcoma (cancerous bone tumour) in her right ankle at the age of 11, which then had to be amputated.
- Samantha's left limb was amputated below knee in 2005 due to a car crash; she is now 28 years old and lives in San Diego.
- Angela is a 29 year old woman from Bogotá, who was also involved in a car accident at the age of 16 resulting in a right below knee amputation.
- Elizabeth's limb was amputated below her right knee after a car accident at the age of 19. She is now 23 years old and lives in Los Angeles.

## Data Analysis

The data were analysed using Interpretative Phenomenological Analysis (IPA) which is suited to capturing a person's lived experiences in detail [31]. It is phenomenological in the sense that it allows the participant's world to be examined in relation to their own perception of an event [29]. It also allows the researcher the opportunity to try and relate to the participants and actively engage in the research [32] .IPA has previously been used widely in

health psychology research and in studies of people's experiences of an altered appearance [19, 33, 34] and prosthesis use [21] since it is considered well suited to understanding participants' relationships with their bodies [35]. Furthermore, IPA enables a twofold approach with input from both the participants and the researcher [36] – this was particularly relevant in the current study due to the insider view of the first author who is, herself, a below knee amputee. Legro et al [37] note it is hard for non-amputees to understand the emotions felt by those living without one or more limbs. The first author could view participants' responses from the perspective of having personal experience of being an amputee, and this may have enabled the participants to feel more comfortable discussing this potentially very sensitive and personal topic. However, this level of personal involvement in the area could be seen as both a benefit and limitation to the analysis, so a reflective log was maintained throughout the research. The first author's analysis was checked by the second, who does not have personal experience of limb loss. This involved reviewing the transcripts and the first author's analysis, after which the two authors discussed their findings and some adjustments to the themes were made in light of this discussion.

Analysis began by noting on the transcripts any points of interest or that appeared significant, in order to make initial observations and interpretations of the text. Themes that began to emerge were highlighted and collated separately on a new sheet of paper for each interview, with the aim of reducing the likelihood of carrying over themes from the analysis of one interview to the next, so that the analysis of each interview was true to the text [29]. Similar themes from each interview were combined and given a main heading prior to looking across the data to discern both similar and dis-similar themes. The most prevalent of these formed the main themes that are reported in this paper, supported by quotes from the interviews. The themes were constantly reviewed whilst the research was being written up, to ensure the participants' words were not misconstrued. Pseudonyms, chosen by the participants, are used throughout this paper to allow anonymity and any details mentioned in

the interviews that could be used to identify the participants have been altered or anonymised.

### Results/Analysis

The analysis of data relating to female below-knee amputees' experiences of dating and approaching intimate relationships resulted in 5 themes: Revealing and Exposing: Disclosing the Amputation and Prosthesis; Judging and Judged: Internal Fears and Self- Doubt;

Trusting and Accepting: Good Guy/ Bad Guy Elimination; Taking it Further: The Need for Depth; Realisation: Accepting and Feeling Accepted

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## Revealing and Exposing: Disclosing the Amputation and Prosthesis

Participants described becoming generally more honest and revealing (both verbally and visually) about their amputation as their confidence in relation to their prosthetic limb increased. This openness had made approaching intimate relationships easier as it helped them to feel more comfortable during the early stages and to disclose their amputation. It also meant that potential romantic partners often knew about the amputation from the outset. If they did not, the women in this study chose to tell them as soon as possible.

"I feel that it's best to tell them either before going out or as soon as possible. It makes things more comfortable for me..." (Samantha)

"First date...Usually when a guy asks me to go out he already knows about my leg" (Angela)

Although these women associated the prosthetic with their identity and appeared to be confident discussing their amputation, some described how they had, at times, still struggled to become more open about the prosthetic limb. They talked about how they occasionally

felt less confident, how the prosthesis could become a source of anxiety and how, at such times, they may resort back to concealment:

"I have become more and more open with it over time, I used to be very shy about it but it has now become a part of me. It's normal now. My hard and bad days with it are far and few between now" (Samantha)

"Yeah my confidence has grown but you still have moments where I wanna wear a short

dress but opt for jeans instead" (Lisan)

All 4 women in this study described situations when disclosing the amputated limb had, they felt, led to immediate judgements being made by other people, for example the person they were courting. These judgements could be interpreted as reflecting society's stereotypical view of 'women with a disability' as being sickly, in need, fragile and breakable:

"Ahh yes there has been a time when I didn't want it to come up because I didn't want it to affect how he saw me but it did come up and I told him and it kinda changed how he saw me... but I'm still Lisan" (Lisan)

"Some guys started to treat me differently, like baby me, which I hate" (Samantha)

Participants were at pains to emphasise that they should not be treated differently, just because they had revealed the amputation. However, any change in others' behaviour did not go unnoticed. Rather, it was generally accepted and viewed positively (such as curiosity), if it did not associate them with a 'disabled' identity.

This openness and honesty was uniquely essential when dealing with romantic relationships, and did not extend to other aspects of their lives, such as employment, where most disclosed that they would conceal their limb loss, if possible:

Interviewer: Has there ever been any occasions where you haven't or haven't wanted to tell someone about your prosthesis?

"Yes, but not in a dating kind of way. In professional situations" (Elizabeth)

# Judging and Judged: Internal Fears and Self- Doubt

Despite their apparent self-assurance and portrayal of a confident exterior, participants described how they still suffered society's constant pressure "to be beautiful" and to meet an ideal which tends not to include amputees. They were concerned about what future partners may make of their unconventional form and described efforts to 'compensate' by focussing attention on other aspects of their appearance.

"I was more self conscious than before, I thought everything else had to be perfect (hair, skin, nails, weight, clothes) because I had a 'defect'." (Samantha)

"I was freaking out about whether someone would ever want to stick around."(Elizabeth)

Participants described feeling frustrated at others' responses (such as questioning and staring) and feeling undesirable, unattractive and vulnerable when looking at their amputation, and the associated scarring.

"Even when I tried to look pretty...people would be drawn to asking me about it or they'd stare" (Lisan)

"I have to admit that if I could change this I definitely would... when I look at a picture of

my entire body I realize how not pretty it looks..." (Angela)

"They had to take grafts from the front of my left thigh to cover the residual limb which 'ruined' my left thigh... it was so ugly! I had these big ugly scares in addition to the shiny new metal leg!" (Elizabeth)

Feeling unattractive, judged and a sense of failing to achieve the high ideals portrayed by the media are responses often reported by most women at some point or another, regardless of whether they have an amputation. However, the participants' accounts reveal how this can be particularly disheartening for female amputees who cannot 'fix' this trait. Women reported how fears of rejection left them waiting to be approached by potential partners instead of feeling confident enough to pursue someone themselves:

"For a while I was hesitant. I still can be at times." (Samantha)

"Yeah I don't usually approach them (guys), I'm confident but you won't find me in the middle of the dance floor." (Lisan)

After overcoming the initial hurdles, participants were potentially faced with the issue of intimacy - a topic that can be difficult to discuss at the best of times, but may be especially difficult for someone with an amputation given the 'taboo' nature of not only intimacy, but also disability [1]. Participants felt confused and worried about how to approach intimacy, manage any physical limitations and the psychological impact this may have. In the quote below, Lisan describes how her experiences were unlike those depicted in popular media:

"We (female friends) discuss sex and stuff but when you think and read about it so far I haven't read one romance novel where the lady stops and takes off her leg or arm lol (laugh out loud)." (Lisan)

"The sexual stuff... like... will he think my leg is ugly? Or like... how do I take off my pants in a sexy way, when I have to take off my leg, pull it out of the pants, then put it back on... Or how annoying it is to take off shoes, you can't really be sexy if you have one shoe on and one shoe off. You just look goofy." (Elizabeth)

Yet the participants' accounts showed how they had a strong sense of resilience and how a positive attitude helped them to manage the difficulties when faced with the seemingly impossible goals set by the standards of society:

"I had a casual fling with someone, and it made me realise that not much had changed.

That I could still date, feel attractive, flirt, go out" (Elizabeth)

"..but I think I'm still a desirable woman..." (Angela)

"I react to it like they just don't like something about me, which is fine. It's like saying they
don't like me because my hair isn't brown or something equally superficial. Or
inoffensive. It's fine, some people just don't want the added hassle." (Elizabeth)

Elizabeth's comments indicate that what may be perceived as negative attitudes may be viewed by the amputee as simply stereotypical, shallow or, as Davis [38] has suggested, like the Venus De Milo; too real when translated into the flesh.

# Trusting and Accepting: Good Guy/ Bad Guy Elimination

In light of the worries and insecurities highlighted above, the female amputees in this study described being cautious about who they become intimately involved with. Trust, acceptance and understanding were highly desirable qualities in a potential partner, and women used reactions to the prosthesis to effectively screen out those who they believed were not able to see them for who they are:

"I'm just cautious because I don't want to get hurt. I think at times it can make me a bit vulnerable." (Samantha)

"(You) have to not only find the ones who can stand beside you but will stand up for you behind your back." (Lisan)

"Some of the guys were super curious and wanted to know..... Some didn't call me after which I have learned that having a prosthesis is a good filter of bad guys. Good guys don't care." (Samantha)

"I kind of see the leg thing as a test, a lot of people can't handle it, it's too real for them.

So I see it as working to deter those people who aren't really interested in me, in my

personality." (Elizabeth)

Participants hoped that telling a potential partner about the prosthesis, showing it to them, or encouraging them to touch it would help to break down any barriers and hopefully eliminate some of the possible awkwardness experienced by those who had not encountered an amputee before. Participants wanted to prevent stereotyped notions such as that of the 'fragile' amputee (see also above) and described techniques similar to that of the 'ripping off the band-aid' metaphor:

"We were making out...I took his hand and put it on the prosthesis and told him: was this what you were looking at?" (Angela)

Whilst this approach could help some amputees, it also runs the risk of being too much too soon, and could potentially increase feelings of awkwardness.

### Taking it Further: A Need for Depth

Traditionally, the early stages of a relationship enable both parties to determine whether or not a connection has been made and whether a relationship might blossom. These 4 cases indicate that being an amputee presents additional physical challenges at the start of a relationship and can also give them more to consider in terms of any specific qualities they are looking for in their ideal partner:

"It gave me more to add to the list of what to look for in a guy, one who isn't afraid of women with one leg, and doesn't think I'm a fragile thing. Somebody who can accept Minnie (the prosthesis) and I'm comfortable around them with her off." (Lisan)

"I need someone who won't be weird about my scars, who will carry my purse if I'm on crutches, who doesn't mind when I ask him to get me stuff because I already took my leg off and I don't feel like hopping and who will be supportive." (Elizabeth)

Elizabeth described how the qualities did not only relate to the short-term:

"Like considering the long-term, like the fact that I might be physically dependent earlier in life, childbirth, raising a child, things like that." (Elizabeth)

Women talked about seeking emotional vulnerability, depth and meaning in a potential partner. Whilst Elizabeth had previously described how a casual fling had been empowering and had given her confidence in looking for other relationships, she also described how they could leave an amputee feeling emotionally and physically vulnerable due to the internal fears and self doubts discussed above.

"I think the leg thing in general made me less interested in empty flings, so that worked out, since I don't want to let someone into my life who isn't 'real'." (Elizabeth)

Her occasionally contradictory responses highlight the complexity of this sensitive issue.

All the participants described feeling rather isolated with regards to the challenges they faced around intimacy, not knowing others who were in the same situation. They described a need for support around approaching intimacy:

"They always have support for breast cancer patients, I'd like to see something like that,

I mean there's much more than just physical stuff to consider when dating an amputee."

(Lisan)

"I didn't feel like there was a lot of available support in the dating arena". (Samantha)

## Realisation: Accepting and Feeling Accepted

The women in this study described a strenuous and concerted effort to safeguard against feeling emotionally vulnerable before attempting to date or approach an intimate relationship. However, they also utilised their experiences to broaden their own views of what potential romantic partners look for, and thus how they might respond to the amputation. In essence, these women with a below-knee amputation had expected society to view them as inferior compared to 'normally' functioning females, and they had, at times, made assumptions and judgements about how men would respond to them. The realization that these assumptions were not necessarily true had been an enlightening experience. Witnessing someone else's acceptance of the prosthesis that they themselves had sometimes struggled with helped them to feel understood and accepted for who they were:

"I met a guy and we were talking about running so I told him right away that I wear a running prosthesis and I realized he was cool with it and wanted to know more, his positive reaction helped me learn that guys can be that way." (Samantha)

"I was fascinated that it wasn't weird to him." (Elizabeth)

These extracts also illustrate the relevance and importance that participants placed upon others in order to feel comfortable with themselves. This seemed to be a reciprocal, dynamic process as feelings and confidence evolved over time. In the quote below, Samantha reflects on how her own growing sense of comfort about the prosthesis had had a positive impact on the reactions of others, which in turn had increased her sense of confidence further:

"Once I was comfortable with it, everyone around seemed to be...." (Samantha)

### **Discussion**

The aim of this study was to shed light on female below-knee amputees' experiences of dating and intimate relationships. As discussed, this topic has received relatively little attention in previous research [1]. A limited number of studies have previously examined the impact of visible difference/altered appearance on the formation of romantic and intimate relationships, but whilst these have included people with a range of visible differences [23], skin conditions [39, 40], cancer [41] and burns scarring [42], the experiences of people with amputations have received comparatively and surprisingly little attention. Recent research [43] has identified support from romantic partners to be one of the factors that can influence adjustment to an unusual appearance or visible difference. The current study adds to this emerging literature on body image and intimate relationships.

In contrast to some previous research [44], this study found that being able to conceal the prosthesis was not necessarily beneficial when it came to dating. Instead, women in this study preferred potential partners to be aware of the prosthesis from the outset, helping to reduce anxiety about how and when to 'reveal' it. This supports previous reports [8, 45] of the awkwardness experienced by amputees when having to tell others about the limb loss and prosthesis.

However, the potential benefits associated with concealment, such as avoiding discouraging a potential partner on the basis of their 'disability' have been described elsewhere [46] and were discussed by the women in the current study. Despite still feeling insecure at times, they felt increasingly comfortable and confident within themselves, without the need to conceal their amputation. Those who the participants perceived as judging them purely on the basis of their prosthesis were viewed as closed-minded and rejected as potential partners, before the opportunity to reject the amputee arose. These findings support those of other researchers who argue that by being publically open about the prosthesis, amputees

reject any stigmatization of their physical appearance and prevent internalizing a feeling of inferiority to that of able-bodied people [13].

Western societies place increasing emphasis on appearance, and the unrealistic quest for "the body beautiful". Societal ideals dictate that the body needs to be whole in order to be beautiful [47] and the women in this study had, like many other women and men, internalized this ideal and a feeling of inferiority because they considered themselves to deviate from a culturally constructed 'norm'. However, they also described how they had embraced their prosthetic limb as having a positive role in identifying a potential partner. Rather than risking being rejected by a potential partner on the basis of being 'disabled' or 'unattractive', women used their prosthesis to test for intentions and virtue. Rather than being ashamed of their prosthesis, they demonstrated a sense of empowerment as they chose to reject those whose reactions displeased them. This approach allowed them to take a view more in the line of, 'You don't like it? There's the door', with no deception and hoping that a potential partner will 'see past it'.

Yet, despite the apparent and positive attitudes and resilience demonstrated within these accounts, it is important to acknowledge that participants still had doubts at times, and the journey towards long term relationships was not easy. In addition to the actual reactions of others, they also had to deal with their own expectations about how others might judge and respond to them. This is a vivid illustration of Newell's [48] model of fear of negative appraisal which has been widely used in relation to visible difference (disfigurement). Specifically, participants described being wary that other people might respond negatively to their amputation (unusual appearance) and therefore tended to avoid anxiety-provoking situations (such as intimate encounters) in which they would be exposed to other people's responses and attitudes. However, avoiding these situations prevents them from developing strategies to manage similar situations in the future and thereby reinforces future avoidance.

Women had to overcome any of their own dissatisfaction with their appearance and their prosthesis before they could feel fully comfortable with it. They had internalised societal stereotypes that led them to expect a barrage of discrimination, and the media's portrayal of beauty left them feeling inferior [47] and assuming that everyone held these views. However, when they realised that people were not necessarily prejudiced towards them, they were able to take steps towards feeling comfortable and confident within themselves. This supports findings from a study [49] of sexual esteem and behaviour which found sexual esteem increased over time, possibly because individuals had had more time and opportunities to be met with acceptance by others and, consequently, to accept their own physical difference.

Whilst the current study has shed light on a previously under-researched area, it does have a number of limitations. First, although IPA is best suited to small homogenous samples providing rich data, such as in this study, the findings cannot be generalised. The participants in this study were over 18 years of age and the experiences of younger people who are living with an amputation and facing the potentially daunting prospect of establishing intimate relationships for the first time need to be explored, as does the extent to which the support currently available for this group is appropriate.

The participants in this study were all female and heterosexual. Future research could explore the experiences of male amputees, or lesbian, gay or bisexual people, and those living in other countries and with differing healthcare systems. Furthermore, the experiences of women with above-knee amputations may differ to those within this study since it is likely that they will be less able to conceal the amputation or prosthesis, and this warrants consideration in future research. Also, the 4 women in the current study each lost a lower limb due to a traumatic injury or disease and it would be interesting to explore whether the experiences of women with congenital limb loss (i.e the limb was missing at birth) differed in any respect to those reported in this paper. Upper limb amputees' experiences of

relationships also need to be explored in more detail and, since the findings of our small sample cannot be generalised, further research is needed to examine whether these issues are evident amongst a larger, more diverse sample. Online surveys and/or recruitment through hospital clinics and support groups for people with amputations would be useful in this respect.

The participants in this study were all recruited through Facebook. Whilst we consider this to have been an effective strategy, we do not know whether lower limb amputees who use this or other types of social media might differ in any respect to those who do not. Again, this limits the generalisability of our findings and is an area worthy of further investigation.

Our study used real-time email interviews which have been recommended by others [23] who have conducted online research to examine the sensitive topic of young people's experiences of relationships and visible differences. Previous research with amputees has also used email interviews in combination with face-to-face interviews and analysis of online discussion forums [see 8 and 21]. Online data collection in the current study allowed for an un-invasive approach and, although face-to-face interviews might enable the establishment of rapport more easily, it is important to bear in mind that some people might find discussing these personal issues difficult and may be more likely to participate in a "faceless" online study. Furthermore, the first author's position as an amputee herself may have facilitated the interviews and a sense of empathy and understanding with the participants which may, on this occasion, have counter-balanced any barriers felt from a potentially impersonal interaction without face-to-face contact.

The current study raises issues around the provision of support that is provided to below-knee amputees, specifically around dating and intimate relationships. For example, the women in our study reported a sense of isolation and a wish that they could discuss their concerns and experiences with others. Health professionals may feel uncomfortable asking amputees about intimacy and relationships, but doing so as part of routine clinic

appointments could help to reduce any sense of 'taboo' around the subject and make it easier for amputees to raise any concerns. Clear systems should be in place to identify any amputees who are experiencing particularly difficult problems in this area and to refer them on to specialist support (e.g. clinical psychologists, counsellors). Facilitating contact with other amputees (for example through face-to-face meetings, providing details of local support groups or access to online forums) could help many amputees by offering a means of sharing experiences and concerns with others who are, or have been, in a similar situation.

We hope this study will go some way to raising awareness amongst healthcare professionals of an important aspect of amputees' lives, and encourage them to ensure that services to support their patients' rehabilitation consider these issues which could help to promote well-being and quality of life.

### Conclusion

The current study examined 4 women's experiences of dating and intimate relationships after a below-knee amputation. It has highlighted the inner conflict and challenges they had initially faced when approaching new relationships and when comparing themselves to unrealistic Western ideals of appearance. Some found that their views of other people's reactions to them were challenged and positively used their prosthesis as a way of screening potential partners. The findings highlight the need to include issues around intimacy and relationships into amputees' rehabilitation and the need for further research in this area.

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### **Declaration of interests:**

The authors report no declarations of interest.

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