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**'Less like a drug than a drug': the use of St John's wort among people who self-identify as
having depression and/or anxiety symptoms**

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Summary

Objective:

St John's wort (SJW) is one of the most commonly used complementary medicines (CM) for the self-treatment of depression which can be accessed with or without health professional advice. While there is evidence to support its effectiveness in depression it has potential for serious side effects and interactions with many pharmaceuticals and herbs.. Despite the potential risks, we know little about consumer perspectives on use of SJW. Our research aimed to understand, from their own perspective, how and why people use SJW for management of self-identified 'depression, stress or worries'.

Design:

A qualitative design, focusing on understanding the reasons for SJW use. A purposive sampling strategy was used to recruit forty-one people who self-identified as having used SJW for 'depression stress or worries' from the community in Melbourne, Australia. In-depth face-to-face interviews were conducted. Interviews were taped, transcribed and analysed thematically.

Results:

Three themes emerged as to why participants used SJW – ease of access of SJW, perceptions of effectiveness and safety of SJW enabling control over its use, and the perceived benefits of using a natural product. Generally, participants did not reserve use of SJW only for mild depressive symptoms.

Conclusions:

People use many self-care strategies to manage symptoms of depression, including more severe symptoms. While there is often a preference for more natural approaches like SJW, people experiment and continue to use what they perceive is most effective for them.

INTRODUCTION

St John's wort (SJW) (*Hypericum perforatum*) is the most commonly used complementary medicine (CM) for the self-treatment of depression¹. It is also widely used for the medication of self defined stress and anxiety. For example, one community based Australian study found that approximately 3% of the population took CAM for depression or anxiety; with SJW being the most popular choice. Participants often used more than one CAM for treatment².

A recent Cochrane systematic review concluded that SJW for people with mild to moderately severe symptoms of depression was not only superior to placebo overall, but also similarly effective to pharmaceutical antidepressant medications (AD)³. Compared to ADs, SJW has fewer adverse effects^{3,4} making it a realistic alternative to pharmaceutical intervention. However, the use of SJW is not without risks, as it has the potential to interact with many drugs⁵. Despite this potential for harm, SJW is available directly to consumers, without professional guidance. We have previously found that while general practitioners (GPs) do recommend SJW to their patients, they are less knowledgeable about SJW than AD and are unlikely to recommend exact dosages as they are confused by the lack of uniformity of extracts contained within SJW products^{6,7}.

Studies about CAM use in general provide an overview of the key themes that help explain use of SJW. Some relate to medical care. For example, lack of success with conventional medicine (or a poor prognosis), lack of trust or unsatisfactory interactions with health professionals, or the wish for an holistic approach are important^{8,9}. Similarly beliefs about CAM influence its use. Perceptions of naturalness and safety (particularly alongside negative beliefs about conventional medicine) that leads to a lack of questioning of the possibility of side effects^{8,9}, CAM as a strategy for wellbeing¹⁰ alongside the desire for personal control have been found as reasons for CAM use. Linked to the idea of personal control, a study of people with MS found that embodied knowledge is highly valued and perceived as facilitated by CAM use⁸.

There are a range of similar reasons for the use of CAM for depression: dissatisfaction with conventional treatment options for depression;^{11,12} a preference for a natural treatment approach;¹³⁻¹⁵ a desire to be in control of one's own health;^{14,16} and a desire for treatment that aligns with one's own beliefs, values and philosophical orientation to health care.^{11,15,16} The use of CAMs, in general, and SJW in particular for mental health issues in the context of a reluctance to seek medical advice for mental health problems, primarily due to the stigmatised nature of mental illness, may increase the likelihood that people will choose to self-treat without seeking medical intervention¹⁷. A study of people with depression in primary care found that just under half used 'self-chosen' therapies, with the most common being SJW¹³. Again, lack of consultation with health care providers was found, as was the perception that herbal remedies were natural, safe and with no side effects.

The scant research to date specifically on use of SJW has tended to focus on users' perceptions of its effectiveness, side-effects and whether they disclose their use of SJW to the doctors or use it concurrently with AD^{18,19}. Only one study worldwide has specifically investigated why people choose to self-treat their depression with SJW. This interview study was undertaken in the USA in 1999 with 20 community-based users of SJW, 19 women and 1 man. Personal health beliefs, mildly depressed mood, perceptions of their illness along with the risks of treatment, and issues of access to health care, were the key contributors to the decision to use SJW²⁰.

While this study provides useful information, the experiences of men were little explored and in the intervening years there has been an accumulation of evidence about SJW's effectiveness and safety profile, its widespread usage and potential to become a mainstream treatment²¹. We aimed to explore why and how people use SJW for the treatment of self-identified depression or anxiety.

METHODS

A qualitative approach enables in-depth investigations of the meanings that people ascribe to their beliefs and actions, and thus an in-depth interview study was designed²². We aimed to develop a comprehensive understanding about how and why people used SJW for 'depression, stress or worries'. We used the term 'depression, stress and worries' as we

wished to identify people using SJW across the spectrum of depressive and anxiety symptoms and we did not require that participants identify with the label of depression as a medical diagnosis. Using a purposive sampling strategy, we sought information rich participants comprising both women and men of different ages and with a variety of backgrounds and experiences with SJW. Participants were people aged 18 and over, with current or recent experience of using SJW for the treatment of 'depression, stress, or worries'. Participants were recruited using advertisements placed in health food shops, pharmacies, naturopathy and medical clinics, in University staff and student newsletters, and well known social networking sites. Recruitment ceased when ongoing analysis indicated that there was a range of gender and ages, and no new experiences or opinions were being reported.

Participants took part in face-to-face interviews, between one and three hours duration, in a place and time of their choosing. The interview guide prompted for information about individuals' healthcare history, their use of SJW, negotiation and integration of pharmaceutical and CM treatments, sources of information, and advice received from health practitioners including CM therapists. Prompts were used throughout the interviews to ensure that key areas of interest were covered. A gift token (\$AUD 30) was offered to participants at the end of the interview in recognition of their contribution and time.

Interviews were transcribed in full and then coded (tagging of text relating to each expressed idea) using NVivo 9 software. The coded text was examined to identify similarities and differences in the ideas expressed, and from the patterns in the data that became evident, we generated the key themes²³ about how and why participants used SJW. Pseudonyms are used in reporting the results.

The project was approved by the University of Melbourne Human Research Ethics Committee. As the topic related to mental health, a protocol was developed for participants showing distress and participants were advised about sources of help if needed. Opportunities for the interviewer to debrief were also provided.

RESULTS

Overview of participants

Tables 1 and 2 provide participant characteristics. Participants had tried a wide range of approaches to manage their distress, including consulting health professionals (Table 2). The place of SJW ranged from a fleeting trial, to intermittent use, to SJW as a long standing therapy. Of the 41 participants, only three (7%) had not consulted any therapist about the problems for which they took SJW, with many participants consulting both conventional and complementary practitioners.

Most participants used SJW as tablets, often preferring a specific brand that was seen to be either of better quality or cheaper. Several had used SJW as part of an herbal mix from a naturopath, as tea, or as an oil diffused in their bath or rubbed into their skin. Most were aware of possible drug interactions from reading the information on the packet, which is required by Australian regulation.

Male participants were less likely to have used anti-depressant medications. No male participants currently used anti-depressant medications and only three had ever used anti-depressants (one for only two days). In contrast, most women (n=24) had used anti-depressants.

Three interrelated themes emerged in participants' descriptions of why and how they used SJW: ease of access without needing to see a doctor, positive perceptions of SJW, and a preference for natural products.

Ease of access to SJW without seeing a doctor

Ease of access and the lack of the need to go through a doctor to access SJW was a significant factor in the participants' decision making. SJW is available through health food stores, supermarkets as well as from CAM therapists. As the following quotes indicate, ease of access influenced trialling SJW:

It's quite easy to get hold of - you don't have to go to the doctor or anything - I thought I'd just try that. (Freya, 24, intermittent SJW user)

Then I went to the supermarket and saw it was there. ... This might help me sometimes, so I want to try with that... (Mai, 27, female, ex SJW user, current AD user)

Few participants reported exposure to CAM through their family of origin when young (3/11 men; 3/30 women). In these few cases, family members' disinclination for using prescription medicine was a commonly cited influencing factor in their own decision to use SJW, as discussed by Sophie:

...So when health issues came up with any of our family, most often the first thing that was turned to was diet and or some sort of – like a SJW ...it was always quite normal in our family to only reach for the medicines ...[as] a last resort. (Sophie, 37, current intermittent SJW users)

More commonly, participants came to try SJW after rejecting antidepressants prescribed by their general practitioner (GP) (8/11 (73%) men; 12/30 (40%) women). Participants found SJW through recommendations from psychologists, naturopaths, or staff in pharmacies or health food shops. SJW was also recommended to participants by family members, friends, or colleagues who had found SJW effective for their own emotional difficulties.

Men were more likely to talk about using the Internet as their information source than women who were more likely to draw upon experiential advice from others. This suggests that how people gain information may be influenced by gender, with women more likely to draw on personal relationships for advice and men seeking information through anonymous sources. Men were also less likely than women to have discussed SJW with a health professional. The following two quotes are illustrative of the difference in approach that was evident.

For Lise, not only did her friend recommend SJW but provided it for her:

A friend recommended me St John's Wort and so she brought some teabags that she uses. I don't know how much St John's Wort thing there is in those bags, they're from

the Organic Planet brand. So I took them and they worked straightaway. (Lise, irregular St John's Wort user)

In contrast, Ian went through an extensive 'information gathering' process.

I found out [about SJW] by random reading You get these healthy living sorts of things [magazines] that [Wife's name] might have purchased in that line. Repeated references to these various things that help. Just gathering information from them... These days it's the Internet, just through Google and whatever it threw up. You read this stuff and you know that most of the stuff on Google is not credible, its indicative (Ian, regular SJW user)

Two other two male participants described an information gathering process about evidence. In both cases they indicated their distrust of CAM approach because of lack of efficacy. However, SJW was trusted because there was clear scientific evidence from clinical trials to show that St John's Wort was effective in treating depression. For them, other CAMS were perceived to be "untested", "unproven" and preyed on people's vulnerabilities or "gullibility".

Only six (15%) participants discussed obtaining advice about SJW from GPs, one reason being they did not consider their distress as a medical issue. As this woman explained:

'I only go to the doctor if I'm really sick and maybe need antibiotics. ...So stress and mood sort of issues are just not something that you'd think about talking to a doctor about really. ...I think there are a lot of doctors that medicate without having conversations with people. No, I would look for other alternatives before I'd go to a doctor. (Kerry, 52, used SJW for past two years from a supermarket)

Other participants found doctors did not support their SJW use.

...I'd go in with the literature that I'd got off the internet ... But he had no tolerance whatsoever for using things that he didn't prescribe. (Carol, 60, intermittent long term SJW or ADs)

Some participants clearly saw SJW as an herbal remedy; therefore, it was not part of their GPs' knowledge or domain, and they were consequently reluctant to seek information from their GP.

I'd be worried about telling them [GP] ...because it's like an alternative ...I'd be worried that maybe they would say it was a bad idea or that it doesn't work or something like that. I'd feel a bit funny for telling them. (Freya, 24, intermittent SJW user)

However, while SJW was physically easy to access, ongoing use is expensive, particularly when compared with AD. In Australia, doctor prescribed pharmaceuticals are heavily subsidised but consumers pay full cost of OTC and CAM products. A small number of participants discussed the financial constraints CAM use. Gayle, for example, had stopped trying herbal preparations due to the cost:

I have tried a lot of the natural things but then of course it's a money thing because it costs so much more. (Gayle, 47, not currently using SJW or antidepressants).

However, for Kerry, the cost of SJW was worth it.

It's probably only a dollar a day when I think about it, but I guess it's the initial outlay which is about \$35 for a packet. But it's kind of when you're doing the shopping and you think, add an extra 30 bucks on top of the shopping. You know, it's worth it (Kerry, 52, regular SJW user).

Positive perceptions of SJW

Effectiveness

Participants reported a wide range of effects of SJW, from elation to feeling jittery, to calming or relaxing, through to a flattening or no impact at all. Most participants found SJW helped their symptoms; it was often compared favourably with AD, with effects felt to be more subtle and allowing users to still feel like themselves. For example, when asked what she thought of SJW the first time she used it, Carol responded:

I thought that it was quite good. ...I thought it made me feel more emotionally balanced. ...it didn't give you that feeling of being a contented cow, which the medical ones do. (Carol, 61, intermittent user of SJW or ADs)

Participants relied on their own experiences to decide whether to continue using SJW. As Stephen indicates:

I've had enough periods of depression and tried the St John's wort often enough to conclude that it does seem to work for me. (Stephen, 52, intermittent SJW user)

Many participants reported that when not taking SJW, their symptoms worsened. The world seemed 'bleak' (Robyn, 55, user of both ADs and SJW, trained in naturopathy) or they experienced 'fuzziness' (David, 39, current SJW user) in their mind. This emotional deterioration could occur quite rapidly. This was seen as evidence of the effectiveness of SJW.

...I know they're [SJW] doing something. I do because about five weeks ago, I ran out... Like most people I'm a little bit sceptical ... I ran out and oh God, I just got really depressed straight away. (Martin, 47, current SJW user)

Many participants had experiences of using both SJW and AD. It was unusual for participants to refer to severity of their symptoms as a factor in deciding which medicine to use; however, past experience of what was effective for them was an important influence.

I honestly believe [SJW] was more effective than the two medications that I was on ...I wished I had of started using St John's wort earlier. (Ashley, 26, current SJW user)

[SJW] worked just like Prozac. (Diane, 52, current AD user)

I kind of felt that [an antidepressant] was more of an instant fix than what the St John's wort had been. (Helen, 42, ex SJW user)

Only two participants raised severity of depression as a factor in their decision as to whether to use SJW. As Robyn related:

So yes I got really badly depressed and I actually went on antidepressants [as] I hadn't ever used St John's wort for severe depression. I think you need the big guns... I think St John's wort is great but I don't think it works for really severe depression. (Robyn, 55, user of both ADs and SJW, trained in naturopathy).

Safety

Participants associated SJW with minimal risk. Most were knowledgeable about contraindications to taking SJW, through internet research, SJW packaging and to a lesser extent, GPs. Ease of accessibility of SJW was a significant factor in this perception of low risk.

I guess I assume that for the most part, if they're selling it at a supermarket it can't be too dangerous. (Kerry, 52, current regular SJW user, never discussed with a health professional)

SJW's status as a herb and the perception of low risk influenced how it was used, both in terms of the pattern of usage, which varied widely from 'as needed' for one to two days to regular use for many years, and also variation in dosage. Variables such as bodily responses to SJW as well as the quality of different brands were seen to have an impact on the dose required.

I think it sort of says take one or two daily or as recommended.... The dose is less precise. Because if it's in a plant that people just eat, who knows how much people are eating. It's kind of a bit more airy fairy. (Amanda, 24, ex-user SJW)

The often mild positive effects of SJW and the perception that it was safe meant that participants were unconcerned about how much they took. For example, Kevin said:

I probably self-medicate a bit. It says like one to three daily. I probably take about four or five in the morning and just do it like that... I can sort of self-recognise when I'm going out of sync...and that's when I just sort of go, okay I need – I just dose myself up. (Kevin, 42, irregular St John's Wort user)

In contrast to AD, the fact that SJW could be taken irregularly and stopped suddenly without any ill effects for most participants was seen to indicate that it is non-addictive.

Something like St John's wort I don't think was addictive. (Dominic, 50, intermittent SJW user, never discussed with health professional)

Usually, SJW comprised just one part of a suite of strategies they adopted for their self-care. For some, the emotional stability SJW provided allowed them to put other strategies in place such as improved diet and increased exercise.

I think I only stopped taking it [SJW] when I felt like I was already on the other side... I think I'd created a routine or a habit of work and exercise and things by the time I'd finished taking it, so that it just rolled on. (Sophie, 37, intermittent SJW user)

However, some participants did discuss the side effects of SJW. For example, Leonie had read about “photosensitivity” as a side effect; and Jodi was advised by her acupuncturist that:

... it's really toxic for you, the St John's wort, you need to get off it. (Jodi, 40, current SJW and ex-AD user)

Control

For many participants, an attraction for using SJW was that it was perceived as being outside of conventional medicine, allowing the freedom to experiment and direct their usage.

... for my own sense of self, I think it was important for me to resource and to use things that I was comfortable with. (Lynda, 58, currently AD user)

Illustrating the importance of personal control over their self-care, participants described how SJW was often used flexibly and intermittently to alleviate feelings of anxiety or sadness, or was used preventively during periods of stress.

... it was about the ...fourth winter I'd been through where I felt crap ...I think I was almost scared that I was going to feel bad... I could feel it coming on so I started taking SJW to prevent it. (Ashley, 26, current SJW user)

SJW was also taken as a means of alleviating anxiety or boosting mood prior to social occasions or other potentially stressful events.

He [counsellor] said, 'you're feeling a bit down, you don't want to go out. Maybe take a couple of these tablets a couple of hours or an hour before you go out'...I found by taking SJW I was actually able to go out and feel elated so to speak. (Dominic, 50, intermittent SJW user, never discussed with health professional)

Preference for natural products as opposed to antidepressant medications

Participants typically described SJW as a natural product, not a drug or chemical. They used terms to describe it such as 'herb', 'herbal', 'tea', 'plant extract' or 'oil'. This conceptualisation contributed to participants' perceptions of SJW as a natural (and therefore safe) product that they felt "comfortable" using. Some participants also equated 'natural' with 'good for you'. The notion of 'natural' as better than taking 'chemicals' is illustrated by Anita:

All the other medications never really made me feel the way that I do now - more natural rather than all the chemicals in my body.... (Anita, 37, current SJW user)

SJW was generally perceived as 'natural' and akin to taking a 'vitamin tablet, or as Amanda states, 'a naturally occurring chemical':

When you put... man-made chemicals, into your body, you sort of wonder how they're going to interact with everything. Whereas when you think this is just a natural plant extract, it can't be that bad for me. Obviously it's a chemical. But it's a naturally occurring chemical. ...So I kind of have it in my head I'm feeling quite sad, I'll take one of these plant extracts. (Amanda, 23, current SJW user)

I guess from a physical, mental, I don't know point of view, I don't know which is the better but somehow taking the St John's wort always feels less like a drug than the drug. (Tanya, 43, current AD user)

or SJW was viewed as harmless:

...it seems to me that [SJW's] a fairly harmless alternative to other options. (Kerry, 52, current SJW user)

In contrast to the naturalness of SJW, AD were seen as having the potential to 'change a person' (Ian, 56, current SJW user), whereas SJW eased symptoms of emotional distress while still allowing them to 'feel' (Lise, 47, occasional SJW user). As Tanya related:

I found that the medications really flattened my mood and took the drive out... The SJW doesn't do that to you ... I'd still be myself but I just don't have the same peaks and troughs with the anxiety and the depression ... I still feel in control of my emotions. I just feel that my emotions aren't controlling me. (Tracey, 50, ex- user of both SJW and AD, trained as a nurse)

For some participants, the stigma surrounding AD influenced their decision to use SJW. Antidepressant use was seen to be 'admitting defeat' (Annette, 54, occasional SJW user) and choosing not to take AD was a matter of 'pride' (Kevin, 42, occasional SJW user). SJW was framed as a wellbeing strategy and, as such, did not carry the same stigma.

...the medication for me was a stigma. The SJW is doing the same thing... but it's a herbal thing over the counter ... I don't advertise it, but if somebody found it ... you can always make excuses - sometimes you get a bit tired. It's got about ten things it helps ... but when you're on antidepressants, that means –'what's wrong with you'? (Kevin, 42, occasional SJW user)

DISCUSSION

We identified three interrelated themes of why people use SJW: ease of access; positive perceptions of SJW effectiveness, safety and control; and naturalness of SJW compared to ADs. Our sample contained people from a range of backgrounds and ages, including older people and men. Few participants were orientated to alternative approaches to health and well-being from their childhood. Our findings support earlier reported studies and provide new insights particularly via the diversity of the sample, the inclusion of men's views and the clear illustration of different types of use (occasional, intermittent and regular). Our findings also provide valuable insights into what influences the decision to use SJW. People did

varying levels of research before accessing SJW – women were more likely to draw upon personal relationships whereas men tended to use the anonymous ‘security’ of the Internet. Ease of access and perceptions of safety gave people the freedom to experiment with SJW in terms of whether it worked for them, the dosage, the frequency, and in what circumstances to take it. SJW was rarely used as a single treatment strategy. Most participants reported using SJW as one of many strategies to manage their depression, stress and worries, a finding supported by other large Australian surveys^{24,25}

This is a small study, but some findings about how gender shapes SJW use may be indicative and worthy of further investigation. First, the sources of information that influence use appear to be different for men and for women. Second, it appears that women were more likely to have consulted a health professional for their distress. Third, while both men and women used SJW intermittently, this appeared to be a stronger trend amongst men, who would take it for a broader range of reasons, including anticipation of stressful social events, and would expect (and usually report) an immediate effect.

There were some differences between our study and the only similar study previously reported by Wagner *et al*²⁰ in the USA. Unlike the Wagner study, few participants were oriented to alternative lifestyles and approaches to healing from childhood, although proportionally, many more men than women matched this description. Also, our sample in general did not reserve SJW use for mild depression, as found by Wagner. In fact, SJW was often seen by our participants as a valid alternative to pharmaceutical antidepressants for a broad range of severity of symptoms.

A strength of this qualitative study is its use of a relatively large, community-based, mixed gender sample of participants and face-to-face interviews. It has therefore been possible to explore the experiences of those individuals who may use SJW without accessing conventional health or CM services. However, while we obtained a diverse sample, in terms of demographic and experience of SJW, participants were self-selected which may have led to a sample with more favourable SJW experiences.

Changes over the past 15 years in how SJW is used and viewed may reflect accumulating evidence on its effectiveness or the broad increase in CAM use by consumers for a wide

range of health issues, including mental health, leading to SJW becoming viewed as a mainstream option. Despite a preference for naturalness expressed by many of our participants, the more important issue was whether SJW worked for them. If SJW was found not to be effective, they would seek other options to deal with their distress, including antidepressant pharmaceuticals (which most of our participants had taken at some point).

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Conflict of Interest Statement: Nil

Table 1. Participant demographics (N = 41)

SEX	Male	11
	Female	30
Age (years)	20-29	8
	30-39	4
	40-49	11
	50-59	15
	60 and over	3
Country of birth	Australia	34
	UK	4
	Europe other than UK	2
	Asia	1
Education	Year 12 or less	9
	Post-secondary qualifications	32

Table 2. Participant characteristics* (N = 41)

Medicines used	SJW – current	24
	Pharmaceutical antidepressants - now	11
	Pharmaceutical antidepressants - ever	33
Life events leading to using SJW	Minor or temporary problem	4
	Serious physical illness or disability	6
	Childhood trauma	16
	Adult family trauma	13
	Workplace-related trauma	6
Conventional health professionals consulted for depression, stress or worries	No therapist	3
	General practitioners	38
	Psychologists	24
	Psychiatrists	12
	Counsellors	7
	Telephone hotlines	5
	Social workers	2
Complementary health professionals consulted for depression, stress or worries	Naturopaths	17
	Traditional Chinese medicine	7
	Reiki/ myotherapy/ massage	10

*Categories not mutually exclusive

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Highlights

- St John's wort is a self-care strategy used to manage depressive symptoms, from mild to severe
- St John's wort is rarely used as a single treatment strategy
- St John's wort is used because it is: easy to access; perceived as natural, effective and safe
- Women and men use different decision making processes when deciding about using St John's wort



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