‘You’re never going to get anywhere’
A mixed methods examination of the process of cardiovascular disease risk assessment & communication with psoriasis patients

Pauline Nelson, Research Fellow
Manchester Centre for Dermatology Research, University of Manchester

10th UKSBM Annual Scientific Meeting: 3-4 Dec 2014, Nottingham, UK
Identification & Management of Psoriasis-Associated Co-morbidiTy (IMPACT) Programme

WORKSTREAM 1
Focus: Disease burden
Study 1.i: Systematic Reviews
Study 1.ii: Epidemiological survey
Study 1.iii: Economic modelling of care costs

WORKSTREAM 2
Focus: CVD risk
Study 2.i: Screening for CVD risk
Study 2.ii: CVD risk communication and reduction

WORKSTREAM 3
Focus: Learning from people with psoriasis
Study 3: Qualitative study of coping

WORKSTREAM 4
Focus: Barriers to provision of support lifestyle behaviour change
Study 4: Practitioners

WORKSTREAM 5
Focus: Improving physical & psychological outcomes for people with psoriasis & associated co-morbidities
Study 5.i: Develop and evaluate intervention to improve self-care and coping for people with psoriasis
Study 5.ii: Develop and evaluate integrated training package for health care staff to improve access to targeted services for people with psoriasis

Synthesis of findings from Workstreams 1-4
Psoriasis: A complex long-term condition

PSORIASIS¹-³

¹Parisi et al 2013  ²Griffiths & Barker 2007 ³Lebwohl 2003
Psoriasis:
A complex long-term condition

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Psoriasis: A complex long-term condition

1. Parisi et al 2013
2. Griffiths & Barker 2007
3. Lebwohl 2003
4. Kimball et al 2010
5. Rapp et al 1999
7. Kurd et al 2010
8. Singhal et al 2014
10. Gelfand et al 2006
12. Augustin et al 2010
13. Samarasekera et al 2013
Psoriasis & lifestyle

• Psoriasis associated with **unhealthy lifestyle**
  – Worsens condition and confers risk for CVD\textsuperscript{14-17}

\textsuperscript{14}Favato 2008  \textsuperscript{15}Naldi et al 2005  \textsuperscript{16}Wolk et al 2009  \textsuperscript{17}Kirby et al 2008
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• High levels of unacknowledged\textsuperscript{18} **distress in psoriasis**
  – Likely to affect self-management and **behavioural choices**\textsuperscript{17,19}

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• Lifestyle behaviour change (LBC) beneficial in psoriasis$^{20,21}$

• Clinicians **recommended to address LBC with patients**$^{22}$
  – **BUT** lack of training/confidence to do this in psoriasis$^{23,24}$

$^{14}$Favato 2008  $^{15}$Naldi et al 2005  $^{16}$Wolk et al 2009  $^{17}$Kirby et al 2008  $^{18}$Nelson et al 2013  $^{19}$Hayes & Koo 2010
Cardiovascular (CVD) risk communication in psoriasis
The IMPACT CVD risk communication study

Behavioural risk factors common in psoriasis
NICE Guidance on psoriasis – discuss co-morbidities & lifestyle\(^{22}\)
Risk perception complex\(^{25}\)
Effectiveness of health checks debated\(^{26-28}\) & evaluation limited\(^{29}\)

\(^{22}\)NICE 2012  \(^{25}\)Waldron et al 2011  \(^{26}\)Krogsboll et al 2013  \(^{27}\)Artac et al 2013  \(^{28}\)Soljak et al 2013  \\
\(^{29}\)Chipchase & Waterall 2013
The IMPACT CVD risk communication study

**Background**

- Behavioural risk factors common in psoriasis
- NICE Guidance on psoriasis – discuss co-morbidities & lifestyle
- Risk perception complex
- Effectiveness of health checks debated & evaluation limited

**Aim to examine:**

- Process of assessing for and communicating about CVD risk in patients with psoriasis (GPs, practice nurses & patients)

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The IMPACT CVD risk communication study

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**Methods**

- Risk factor assessment in 13 general practices

---

CVD risk factor assessment

Biomedical factors
(eg. blood pressure, waist/hip ratio, weight/BMI)

Lifestyle behavioural factors
(eg. smoking, alcohol, diet, physical activity)
CVD risk communication in psoriasis

**Background**
- Behavioural risk factors common in psoriasis
- NICE Guidance on psoriasis – discuss co-morbidities & lifestyle
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**Aim to examine:**
- Process of assessing for and communicating about CVD risk in patients with psoriasis
  - (GPs, practice nurses & patients)

**Methods**
- Risk factor assessment in 13 general practices
- Audio-recordings of risk assessment/follow-up consultations
- Practitioner & patient interviews (tape-assisted-recall)
- Framework Analysis and content analysis

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Final sample  
(all study components)

<table>
<thead>
<tr>
<th>STUDY COMPONENT</th>
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<td>In-depth interviews</td>
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# Final interview sample (practitioners & patients)

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<th>PATIENTS</th>
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<td>General Practitioner (GP)</td>
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Risk factor levels (seen at risk assessment*)

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* Apparent to practitioner and amenable to discussion in consultation

Data from Karen Kane IMPACT Team
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Data from Karen Kane IMPACT Team
Risk assessment consultations
Risk assessment – patient cues

USED OPPORTUNITY
PN2 & P(31)

Thanks to Anna Chisholm & Christina Pearce, IMPACT Team
Risk assessment – patient cues

USED OPPORTUNITY
PN2 & P(31)

PN: You’re 13st 6lbs and it’s saying that at the most you should be 9st 11lbs you see, on the computer. So…

P: Am I in the obese scale?

Thanks to Anna Chisholm & Christina Pearce, IMPACT Team
Risk assessment – patient cues

USED OPPORTUNITY
PN2 & P(31)

PN: You’re 13st 6lbs and it’s saying that at the most you should be 9st 11lbs you see, on the computer. So...

P: Am I in the obese scale?

PN: Yeah...what we gonna do? What do you think you can do exercise wise? They say if you pick something you like you will maintain it and keep doing it, rather than me saying: ‘right you need to go for a walk 5 times a week for half an hour!’

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P: Am I in the obese scale?

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**Thanks to Anna Chisholm & Christina Pearce, IMPACT Team**
### Risk assessment – patient cues

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<td>P: (Laughs)</td>
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<td></td>
<td><strong>GP:</strong> Right now let’s have a look at your medications…</td>
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**Thanks to Anna Chisholm & Christina Pearce, IMPACT Team**
Risk assessment consultations

Commonly missed

Opportunities straight ahead
Limited shared discussion about CVD risk and lifestyle
Limited shared discussion about CVD risk and lifestyle

Maybe [practitioners] can help you with losing weight but I suspect there’s a lot more people they need to help before they help me losing weight! Ultimately it’s your own responsibility.

(P18: male, 57, obese, high waist circumference, smoker, did not disclose units of alcohol)
Limited shared discussion about CVD risk and lifestyle

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(P18: male, 57, obese, high waist circumference, smoker, did not disclose units of alcohol)

From my point of view it was a data gathering exercise as opposed to a discussion about cardiovascular risk with the patient. Of course [patient] may have asked questions during that and if you had time you could try and answer. (GP3)
Limited provision of personalised risk reduction support
Limited provision of personalised risk reduction support

I always treat it exactly the same. I don’t change [information given to patients]. It’s just – what I know is what I give out and that’s it. That’s as much as I do. (PN3)
Limited provision of personalised risk reduction support

I always treat it exactly the same. I don’t change [information given to patients]. It’s just – what I know is what I give out and that’s it. That’s as much as I do.  

(PN3)

You tend to think that unless there’s actually something wrong, they don’t call you in – well, that’s always been my belief.

(P8: male, 54, obese, high waist circumference; 24 units alcohol weekly)
Perceived influence of practitioners in supporting risk reduction
If they tell you they enjoy smoking I feel there’s no point. **You’re never going to get anywhere** with them, so that’s up to them *(PN3)*
I’d rather talk to a health practitioner than somebody at the gym who’s stick thin, loads of muscles and a bit intimidating – so a nice, normal average person who’s go the information is a lot more comfortable.

(P12: female 45, obese, high waist circumference)

If they tell you they enjoy smoking I feel there’s no point. You know you’re never going to get anywhere with them, so that’s up to them

(PN3)
Perceived influence of practitioners in supporting risk reduction

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(P12: female 45, obese, high waist circumference)

If they tell you they enjoy smoking I feel there’s no point. You know you’re never going to get anywhere with them, so that’s up to them

(PN3)

We do need more training because it’s difficult to get these things across.

(PN4)
Conclusions

• **Gaps in current practice for CVD risk screening**
  – high levels of risk factors identified in psoriasis patients
Conclusions

• **Gaps in current practice for CVD risk screening**
  
  – *high levels of risk* factors identified in psoriasis patients
  – *missed opportunities* to support patient understanding of risk and LBC
Conclusions

• **Gaps in current practice for CVD risk screening**
  
  – high levels of risk factors identified in psoriasis patients
  – missed opportunities to support patient understanding of risk and LBC
  – practitioner confidence to deliver personalised LBC support low
Study implications

• **Shift in focus** needed
  
  – move **beyond** information/advice-giving
  
  – focus on **changing beliefs/increasing motivation**

_Nelson, Kane, Chisholm, Pearce, Rutter, Keyworth, Chew-Graham, Griffiths, Cordingley (2014, in prep.)_ 'I should have taken that further’ – missed opportunities during cardiovascular risk assessment in patients with psoriasis: a mixed methods study. _Pat Ed Couns_
Study implications

• **Shift in focus** needed
  
  – **move beyond** information/advice-giving
  – focus on **changing beliefs/increasing motivation**
  – **capitalise** on **opportunities** that present in consultations
    • increase **effectiveness of health checks**
    • **reduce** psoriasis associated **co-morbidity**

Nelson, Kane, Chisholm, Pearce, Rutter, Keyworth, Chew-Graham, Griffiths, Cordingley (2014, in prep.)
'I should have taken that further’ – missed opportunities during cardiovascular risk assessment in patients with psoriasis: a mixed methods study. *Pat Ed Couns*
Acknowledgments

1. All participating practices, patients & clinicians

2. IMPACT co-authors: Karen Kane, Anna Chisholm, Christina Pearce, Chris Keyworth, Martin Rutter, Carolyn Chew-Graham, Chris Griffiths, Lis Cordingley (and the wider IMPACT Team)

3. Help with recruitment: NIHR through the Comprehensive Clinical Network

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References 1

5. Rapp et al., 1999 Psoriasis causes as much disability as other major medical diseases *J Am Acad Dermatol* 41: 401
7. Kurd et al., 2010 The risk of depression, anxiety and suicidality in patients with psoriasis: a population-based cohort study *Arch Dermatol* 146: 891
10. Gelfand et al., 2006 Risk of myocardial infarction in patients with psoriasis *JAMA* 296: 1735
12. Augustin et al., 2010 Co-morbidity and age-related prevalence of psoriasis: analysis of health insurance data in Germany *Acta Derm Venereol* 90:147
14. Favato 2008 High incidence of smoking habit in psoriatic patients *Am J Med* 121 (4) e17
15. Naldi et al., 2005 Diet and physical exercise in psoriasis: a randomized controlled trial *Brit J Dermatol* 170: 634
16. Wolk et al., 2009 Excessive body weight and smoking associates with a high risk of onset of plaque psoriasis *Acta Derm Venereol* 89: 492
17. Kirby et al., 2008 Alcohol consumption and psychological distress in patients with psoriasis *Brit J Dermatol* 158 : 138
20. Jensen et al., 2013 Effect of weight loss on the severity of psoriasis: a randomized clinical study *JAMA Dermatol* 149: 795
21. Naldi et al., 2005 Cigarette smoking, body mass index and stressful life events as risk factors for psoriasis: results from an Italian case-control study *J Invest Dermatol* 125: 61
32. Schreier 2012 *Qualitative content analysis in practice*. London Sage Publications Ltd
Contact details

pauline.nelson@manchester.ac.uk
Current IMPACT intervention work

‘Pso Well’ intervention

Practitioner training (extending skill set to encompass LBC)

Patient materials (broadening understanding of psoriasis)
Risk assessment – patient cues

USED OPPORTUNITY
PN8 & P(32)
Risk assessment – patient cues

USED OPPORTUNITY
PN8 & P(32)

PN: Just as a first thought...a food diary...

P: Right yeah.

PN: ..and writing down for a week what you have during the day, even if just a few crisps..

P: Even if it’s just a few crisps or whatever, yeah course, yeah.
Risk assessment – patient cues

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PN: Then I can see you again with that in 10 days...and we have the option of referring you...it’s which fits into your lifestyle and which you prefer to do...

P: Food diary, course, yep no problem.
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<td>P: Even if it’s just a few crisps or whatever, yeah course, yeah.</td>
<td></td>
</tr>
<tr>
<td><em>PN:</em> Then I can see you again with that in 10 days...and we have the option of referring you...it’s which fits into your lifestyle and which you prefer to do...</td>
<td></td>
</tr>
<tr>
<td>P: Food diary, course, yep no problem.</td>
<td></td>
</tr>
<tr>
<td><strong>USED OPPORTUNITY</strong></td>
<td><strong>MISSED OPPORTUNITY</strong></td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>PN8 &amp; P(32)</td>
<td>PN1 &amp; P(33)</td>
</tr>
</tbody>
</table>

**PN:** Just as a first thought….a food diary...

**P:** Right yeah.

**PN:** ..and writing down for a week what you have during the day, even if just a few crisps..

**P:** Even if it’s just a few crisps or whatever, yeah course, yeah.

**PN:** Then I can see you again with that in 10 days…and we have the option of referring you…it’s which fits into your lifestyle and which you prefer to do...

**P:** Food diary, course, yep no problem.

**P:** I’m desperately trying to lose weight...

**PN:** Have you ever smoked?
Strengths and limitations

• Use of tape-assisted-recall
  – go beyond self-report

• Uptake of risk assessment low (20%)
  – unrepresentative of psoriasis patients?
  – risk factor proportions imprecise?

• Audio-recordings not reflecting routine practice?
  – practitioners said it was the same!

• Social desirability inhibiting responses
## CVD Risk factor definitions*

<table>
<thead>
<tr>
<th>MEASUREMENT</th>
<th>DEFINITION OF RISK</th>
<th>RISK FACTOR REPORTED AT RISK ASSESSMENT CONSULTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td>Self-reported smoker</td>
<td>Current smoker</td>
</tr>
<tr>
<td>Alcohol risk (units per week)</td>
<td>Self-reported units per week</td>
<td>Alcohol units (weekly)&gt;guidelines</td>
</tr>
<tr>
<td></td>
<td>males&gt;21; females&gt;14</td>
<td></td>
</tr>
<tr>
<td>BMI kg/m²</td>
<td>Obese BMI&gt;30</td>
<td>Obese</td>
</tr>
<tr>
<td>Waist (cm)</td>
<td>Males&gt;102; females&gt;88</td>
<td>Very high waist measurement</td>
</tr>
<tr>
<td>Blood pressure (mm Hg)</td>
<td>Mean systolic&gt;140</td>
<td>Raised blood pressure</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean diastolic&gt;90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(final two of three readings)</td>
<td></td>
</tr>
</tbody>
</table>

*Based on current recommended NICE guidance: Obesity CG 43 (2006) and Hypertension CG 127 (2011)*
Measurements recorded at risk assessment

ITEMS RECORDED

1. Smoking status and alcohol units consumed per week as reported by the patient
2. Height and weight
3. Hip and waist circumferences
4. Sitting blood pressure three times
5. Blood samples* to be analysed at the local hospital biochemistry department for:
   - glycosylated haemoglobin ($\text{HbA}_{1c}$)
   - fasting lipids (total cholesterol, LDL-cholesterol, HDL-cholesterol and triglycerides)
   - fasting glucose
   - liver and renal function

*In some cases the blood sample had been taken in advance of the assessment appointment
# Content of interview topic schedules

## TOPICS

### Patient interviews

**General questions**

1. Reasons for taking part in the study
2. Understanding of the study/consultation purpose
3. Understanding of CVD risk and link with psoriasis
4. Perception of personal risk
5. Any changes in views about health since talking part

**Specific questions linked to recording excerpts**

1. Understanding of risk information conveyed by practitioner and ways to reduce risk
2. Perceptions of sources of information, support for lifestyle behaviour change

### Practitioner interviews

**General questions**

1. Reasons for taking part in the study
2. Understanding of the study
3. Type and amount of information given to patients
4. Strategies used to communicate risk to patients
5. Techniques used to address patients’ lifestyle behaviour change
6. Barriers/facilitators to doing lifestyle change work
7. Training needs

**Specific questions linked to recording excerpts**

1. Reflections on what was happening in the consultation including: aims, intentions, intended messages, techniques used, impressions of patients’ understanding, impressions of patients’ emotional reactions, use of personalised/general strategies

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**Impact PSORIASIS**
Consultation audio-recordings: Framework guiding critical listening

TOPICS

Biomedical factors
1. Blood pressure
2. Cholesterol
3. Diabetes risk
4. Family history of CVD
5. Waist and hip measurements
6. Weight and BMI
7. Mood (including stress, depression, anxiety)
8. Psoriasis (severity, co-morbidities, associations with lifestyle behaviours/mood)

Lifestyle behavioural factors:
1. Smoking
2. Alcohol consumption
3. Physical activity
4. Diet

Practitioner communication factors
1. Acknowledgment of patient cues for discussion (e.g. practitioner acknowledges, explores, ignores, shuts down, changes the topic)
2. General communication style (e.g. fast-versus slow-paced, serious versus light-hearted)
3. Approaches to addressing CVD risk (e.g. amount and type of risk information feedback, offer of management plan or review of CVD risk (for lifestyle behaviours or other CVD risk factors)