Welcome to the SCIN study intervention

This intervention aims to support student nurses to protect themselves from hand dermatitis.
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This magazine is part of our study aiming to reduce hand dermatitis among student nurses

It’s been developed by a team of experts in occupational health, skin care and infection control, including:

- Dr Ira Madan – consultant occupational physician
- Dr John English - consultant in occupational dermatology
- Prof Barry Cookson – expert in microbiology and infection control, former Director of the Laboratory of Healthcare Associated Infection at the Health Protection Agency

Reading this magazine should take you no more than twenty minutes
What is hand dermatitis?

Dermatitis is a skin condition caused by contact with a substance that irritates the skin

Key symptoms are:
- Dryness
- Itching
- Redness on the hands

Which can develop into:
- Flaking
- Scaling
- Cracks
- Swelling
- Blisters
Why are student nurses like me at high risk of hand dermatitis?

- Nursing requires frequent and repeated hand cleansing
- Repeated contact with irritant substances, such as soap, and repeated contact with water both prevent the skin barrier working as well as it should
- This can lead to inflammation, or dermatitis
- If you are prone to eczema, or have a related condition such as asthma or hay fever, you are much more at risk of your skin being irritated by these substances
- Even people who have worked in health care for years without getting hand dermatitis still need to take steps to protect themselves
Why are student nurses like me at high risk of hand dermatitis?

- Repeated contact with irritants leads to micro (invisible) damage to the skin.
- Repeated micro damage builds up over time until finally the skin can take no more and erupts into visible dermatitis.
What are the consequences of hand dermatitis for nurses?

- Hand dermatitis can be very painful
- In bad cases, dermatitis can make it hard for nurses to continue working as they can’t perform the necessary hand hygiene tasks
- One staff nurse at Guy’s and St Thomas’ NHS Foundation Trust told us:
  - “My hand dermatitis got so bad I thought that if it got any worse I would have to question my career in nursing. I never realised how debilitating the condition could be, and I don’t think others do until they are affected.”
Some student nurses have had to take time out from their training due to developing hand dermatitis.

Hand dermatitis can affect infection control:

- Broken and inflamed skin is more likely to be colonised by pathogens.
- Nurses with hand dermatitis could unknowingly transmit these pathogens to the patients they’re caring for.
- The pathogens could also lead to the nurses getting infected dermatitis.
Effective strategies for preventing hand dermatitis

- There are various factors that influence your chances of getting hand dermatitis:
  - Using moisturising hand cream
  - Appropriate use of hand rubs and hand washing
  - Using gloves appropriately
  - Taking action when you see early signs of hand dermatitis
Moisturising hand creams

- We have given you a personal supply of moisturising hand cream to use while on your placement.

- Regular use of moisturising hand cream benefits:
  
  - You
    - It’s proven to protect nurses from hand dermatitis
    - Hands feel more comfortable and look less rough
    - Will help you avoid developing dermatitis so severe that you have to take time off work
  
  - Infection control
    - Healthy skin is less likely to harbour pathogens
Moisturising hand creams

How often do I need to use the hand cream?

• On every shift you do for your placement

• 4 – 5 times per shift: before you start, after you finish, and during each of your breaks
Question: How do I avoid the cream making my hands feel greasy?
Answer: Using a 5p sized blob of hand cream, and rubbing it in for at least 30 seconds should get rid of any greasy feeling. Make sure to cover all surfaces of your hands.
Question: Could the hand cream itself be an infection control risk?

Answer: Not if it’s in a tube, like the ones we’ve given you, and you only use it after cleaning your hands.

In the past, there have been cases of healthcare associated infections linked to nurses sharing the same tub of hand cream.

However, having a personal supply stops other people’s hands (and any pathogens on them) coming into contact with the store of cream.
Question: After using the cream, my skin feels a bit damp. Might bacteria grow on it?

Answer: Not according to experts in infection control. We consulted Professor Barry Cookson, an expert in health care associated infections and a member of our study team.

He said there is no research evidence showing that pathogens grow faster on skin treated with hand cream compared to skin that hasn’t been treated.
**Question:** Do I have time for this?

**Answer:** 4-5 times a shift isn’t as often as you might think. We know how busy nursing students are on their placements. That is why we are suggesting you only need to use the cream several times a day, rather than every time you clean your hands.
Research shows that the most common reason nurses don’t follow hand care advice at work is because they’re too busy thinking about other things they need to do and so simply forget.

You are more likely to get round to using hand cream if you make a decision about the time and place you will do so.

For best protection against dermatitis, you need to use hand cream at the start and end of your shift, and when you go on breaks.

Keep the tube of cream somewhere handy:

- The tubes are small enough to fit in the pocket of your uniform.
Let’s start by thinking about the beginning and end of your shift.

In what location at your placement could you apply the hand cream?

• For example, “in the staffroom”

Write this location into the plan below:

Your plan

If I’m about to start or have just finished my shift and I’m _________

then I will apply the cream

Please read your plan three times to yourself. This helps make using the cream a habit.
Now, think about when you go on a break during your shift. You’ll clean your hands first, and then apply the cream.

Where will you be when you apply the cream?

- For example, “in the staffroom”

Write this location into the plan below:

### Your plan

If I’m on a break and I’m ________________________________

______________________________

then I will apply the cream

Please read your plan three times to yourself. This helps make using the cream a habit.
Some nursing tasks require nurses to wear gloves for infection control purposes.

Unfortunately, wearing gloves increases your risk of hand dermatitis by disrupting how your skin naturally stays healthy.
How does wearing gloves affect the skin’s functioning?

- Dermatitis risk increases when the underlying tissues of the skin get dehydrated
- Your skin retains water thanks to substances called natural moisturising factors
- Gloves prevent sweat evaporating, making the skin soggy
- When the skin’s soggy, the body makes fewer natural moisturising factors
- Having fewer natural moisturising factors means that your skin’s ability to retain water in the underlying tissues is reduced
- Your skin gets dehydrated more easily, increasing dermatitis risk

It’s not always possible to use gloves less, because you need to protect patients from infection
Gloves and dermatitis

So, what can you do?

- Make sure you take gloves off at the first moment it’s appropriate to do so.
- Use hand cream regularly to balance out the effects of gloves on your skin’s natural ability to moisturise itself.
Frequent hand cleansing’s a vital part of nursing

Your decisions about whether to use hand rub or to wash your hands with soap must always be in line with the infection control policy at your clinical placement

However, some nurses think hand rubs are worse for their hands than washing them with soap and water

This can lead to them washing their hands even when using hand rubs would be okay from an infection control point of view
Evidence shows that hand washing is worse for the skin than hand rubs:

- Soap is alkaline. The epidermis (top layer) of the skin is slightly acidic, which helps neutralise micro-organisms that are usually alkaline in nature.

- If the skin is repeatedly washed with alkaline soaps, then its pH balance gets disturbed. This reduces its protection.

- Therefore, hand washing with soap is worse for your hands than using hand rubs.
In contrast to the damaging effects of soap, all hand rubs used in the NHS contain moisturisers, so they have a moisturising effect.

- Important! To get this benefit, the rub must be rubbed into the hands until dry.

- If hand rubs sting your hands that is an early sign of skin damage.
  - Try using extra moisturising hand cream for the next week and see if the stinging’s reduced.
  - If extra hand cream doesn’t help, you should consider seeking advice from occupational health.
Some student nurses we have talked to say they have concerns about trying to only wash their hands with soap and water when definitely needed for infection control purposes.

Would any of the following be issues for you?

- Patients and their relatives want to see nurses wash their hands
  - If they ask, explain why you’re using hand rub and that it’s safe in these circumstances
  - This a good opportunity to practise your communication skills - explaining a clinical decision to a patient or their family
- I’m worried about what other nurses would think if I don’t wash my hands as often
  - Other nurses understand the risks of hand dermatitis and don’t want you to put yourself needlessly at risk
  - Using hand rub is faster than soap and water, and your colleagues will appreciate you being able to help them with the next task sooner
  - If you’re unsure about when to wash with soap and when to use hand rubs for infection control, get advice from your mentor or link tutor.
It’s good practice to check your hands at least once a month for the signs of dermatitis:

- Redness
- Scaling/flaking
- Blistering
- Weeping
- Cracking
- Swelling
- Hands with dermatitis can feel itchy, tight or painful

If you get any of these symptoms for more than a couple of days, it would be a good idea to seek support from your OH department.
Hand dermatitis symptoms?
Talk to your occupational health (OH) department

Your OH service wants to prevent the serious consequences of hand dermatitis for nurses

• “The sooner nurses consult us, the sooner we can put a plan in action to get their symptoms under control. The longer a nurse puts up with dermatitis symptoms before coming to see us, the more difficult it is to treat.”

Ira Madan, consultant occupational physician, Guy’s and St Thomas’ NHS Trust

Ira Madan
Why go to occupational health if you think you might have hand dermatitis?

- You’ll get support to prevent your condition becoming more serious
  - OH can arrange treatment and, if necessary, arrange for a temporary change in your duties
  - Keep any disruption to your training to a minimum

- By consulting occupational health, you not only help yourself, but help other nurses
  - It’s only if nurses consult OH, that the department can get a full picture of how frequently nurses develop hand dermatitis
  - Having a full picture means that occupational health can work to identify and reduce the causes of dermatitis in your workplace
Some people are concerned that more senior staff may view visiting OH negatively

- Senior staff we spoke to said that, actually, they’re more likely to view seeking help for hand dermatitis positively

- Not only does it reduce the possibility that you have to take time off sick, but it is taking responsibility for your own wellbeing and promoting good infection control

- Talk to your mentor or link tutor if you feel that you’re being unduly pressured not to visit OH by someone you work with
Contacting occupational health

- It might take a little time and effort to get an OH appointment

  • However, it is much better to spend this time now than have to take time away from your clinical placement because your hand dermatitis symptoms have become very severe

- You could find the contact details for your occupational health service and save the number to your phone. That way, it’s handy if you need it
Checking for dermatitis

- You’re more likely to remember to check for symptoms each month if you pick a specific, easy to remember day to do this on.
- We’d suggest the first or last day of the month
- Write your plan in the space below

Your plan

If it is the __________ day of the month, then I will check my hands for dermatitis symptoms

Read your plan three times to yourself. This helps make checking a habit.
Checking for dermatitis - What to look for

What to look for

- Redness, cracking, scaling, flaking
- Blisters, swelling and weeping
- Are the symptoms getting worse?

If you get these symptoms for more than a few days, then contact OH
Thank you

- You’ve reached the end of this brochure
- Please keep this document so that you can refer back to it and to your plans
- We will email you in a couple of weeks to check how you’re getting on