Systemic Anti-Cancer Therapy (SACT) Administration Safety
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Why?
• Health professionals handling systemic anti-cancer therapy (SACT) agents can be subjected to exposure risks for the duration of their activities with these agents (Sessink, 2016).
• There is a lack of awareness among healthcare workers in relation to the health and safety risks when handling SACT agents (Simons and Toland, 2017).
• Previous work published by the authors in 2017 (Simons and Toland, 2017) exploring immediate adverse effects experienced by nurses during administration of SACT, showed that a total of 46% of respondents in the survey indicated that they had experienced some form of adverse effect either during preparation and administration or following administration of SACT agents.
• After identifying the high level of perceived adverse effects resulting from exposure to SACT agents, it was evident that further research was required to investigate SACT handling safety, to include awareness, training, safety precautions and waste disposal practices.

What?
• A short, anonymous online survey was designed, made up of 8 questions to elicit healthcare professional’s awareness of risk, training undertaken, and safety precautions practiced when handling SACT agents and patient waste.
• The survey was made up of 2 Yes/no questions, and 6 open questions with free text allowing respondents to provide details of their experience and practices.

How?
• The online survey was distributed via e-mail and social media and was open to responses for a period of 15 weeks.
• 61 responses were obtained in total and results analysed by both qualitative and quantitative methods. Qualitative responses were analysed by extracting common themes which are then presented numerically in the diagrams within this poster.

Results
1. Please state how you are involved in handling SACT agents
   - Involvement in SACT Handling (%)

2. Do you think there are any risks to healthcare workers, when handling SACT agents?
   - % of responses

3. Please could you give more details on the reason for your answer to question 2?
   - % of responses

4. Have you received any formal / informal education / training in relation to SACT handling safety?
   - % of responses

5. What current safety precautions do you take when administering SACT agents. (Please state all)

6. What current safety precautions do you take when handling SACT patient waste?

7. How do you dispose of SACT administration equipment

8. If you have received informal / formal education / training on SACT handling safety, please state when (approximately)

Analysis and Recommendations
• Only 59% of respondents had clearly received any training within the last 12 months as per Health and Safety Executive (HSE) guidelines (2014).
• This had subsequently led to lack of awareness of the specific risks (i.e. carcinogenic, teratogenic, mutagenic, health risks and long term effects, research and guidance available).
• Therefore precautions used to minimise exposure to SACT agents do not appear to be adequate. The majority of respondents rely heavily on PPE / gloves and aprons when this is identified within numerous guidelines as the third level of control in the hierarchy of control measures to prevent occupational exposure (HSE, 2014. NIOSH 2004, Sessink et al 2015).

Recommendations:
• When handling SACT agents, control measures should be used in priority order:
  1. Use totally enclosed systems where reasonably practicable;
  2. Control exposure at source, for example, by using adequate extraction systems and appropriate organisational measures;
  3. Issue personal protective equipment where adequate control cannot be achieved by other measures alone. (HSE, 2014)
• Further training – robust training updates every 12 months to incorporate safe handling / health and safety aspects.
• Audit level of precautions taken from administration through to patient waste.
• Audit training content, delivery and compliance of annual provision.
• Further research to explore the effects of education and training on SACT administration safety.
• Further research to explore the surface contamination levels within SACT handling, administration and waste disposal areas.

References
Sessink, P; Sessink, G and Vandenbruus, J (2015) Preventing occupational exposure to cytotoxic, and other hazardous drugs. European Policy Recommendations