TONNA, A. 2023. An insight into my involvement in research on antimicrobial stewardship. Presented at 2023 BPSA (British Pharmaceutical Students Association) webinar: antimicrobial stewardship for World Antimicrobial Resistance Awareness Week 2023 (WAAW 2023), 22 November 2023, [virtual event].

An insight into my involvement in research on antimicrobial stewardship.

TONNA, A.

2023

An insight into my involvement in research on antimicrobial stewardship

Dr Antonella Tonna
Senior Lecturer
School of Pharmacy and Life Sciences
Robert Gordon University, Aberdeen, UK

ROBERT GORDON UNIVERSITY ABERDEEN

ROBERT GORDON UNIVERSITY ABERDEEN

ABERDEEN IN THE SUMMER

ROBERT GORDON UNIVERSITY ABERDEEN

ABERDEEN IN THE WINTER ...

ROBERT GORDON UNIVERSITY ABERDEEN

OUR CAMPUS ...

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Started off as a hospital pharmacist in Malta ... then moved to the UK

- First hospital job in UK was in Oxford where I was a surgical admission and discharge pharmacist

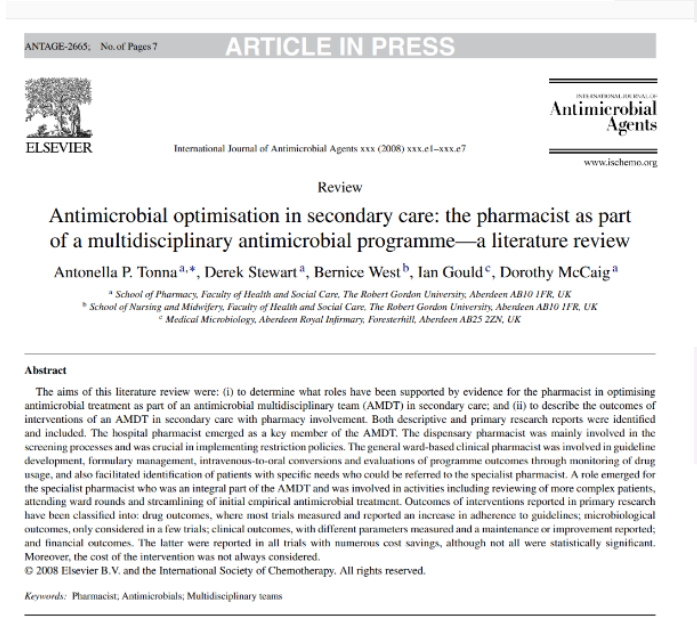
- This is where interest in antimicrobials, antimicrobial prescribing and stewardship started to develop

- Particular issue with aspects such as vancomycin dosing

- Then moved on to start and complete a PhD

Where it all started in terms of research!

My interest in AMS lead to completing a PhD in the area



ANTAGE-2665; No. of Pages 7 **ARTICLE IN PRESS**

ELSEVIER

International Journal of Antimicrobial Agents xxx (2008) xxx.e1–xxx.e7

International Journal of Antimicrobial Agents

www.ischemo.org

Review

Antimicrobial optimisation in secondary care: the pharmacist as part of a multidisciplinary antimicrobial programme—a literature review

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Abstract

The aims of this literature review were: (i) to determine what roles have been supported by evidence for the pharmacist in optimising antimicrobial treatment as part of an antimicrobial multidisciplinary team (AMDT) in secondary care; and (ii) to describe the outcomes of interventions of an AMDT in secondary care with pharmacy involvement. Both descriptive and primary research reports were identified and included. The hospital pharmacist emerged as a key member of the AMDT. The dispensary pharmacist was mainly involved in the screening processes and was crucial in implementing restriction policies. The general ward-based clinical pharmacist was involved in guideline development, formulary management, intravenous-to-oral conversions and evaluations of programme outcomes through monitoring of drug usage, and also facilitated identification of patients with specific needs who could be referred to the specialist pharmacist. A role emerged for the specialist pharmacist who was an integral part of the AMDT and was involved in activities including reviewing of more complex patients, attending ward rounds and streamlining of initial empirical antimicrobial treatment. Outcomes of interventions reported in primary research have been classified into: drug outcomes, where most trials measured and reported an increase in adherence to guidelines; microbiological outcomes, only considered in a few trials; clinical outcomes, with different parameters measured and a maintenance or improvement reported; and financial outcomes. The latter were reported in all trials with numerous cost savings, although not all were statistically significant. Moreover, the cost of the intervention was not always considered.

Keywords: Pharmacist; Antimicrobials; Multidisciplinary teams

IJPP International Journal of Pharmacy Practice

IJPP International Journal of Pharmacy Practice

IJPP 2010, 18: 312–319

Received April 26, 2010
Accepted July 9, 2010
DOI 10.1111/j.2042-7174.2010.00059.x
ISSN 0961-7671

Research Paper

Exploring pharmacists' perceptions of the feasibility and value of pharmacist prescribing of antimicrobials in secondary care in Scotland

Antonella P. Tonna[a], Derek C. Stewart[a], Bernice West[b] and Dorothy J. McCaig[a]

[a]School of Pharmacy and Life Sciences, Robert Gordon University and [b]Faculty of Health and Social Care, Robert Gordon University, Aberdeen, UK

Abstract

Objectives The introduction of non-medical prescribing in the UK has provided opportunities and challenges for pharmacists to help ensure prudent use of antimicrobials. The objective of this research was to explore pharmacists' perceptions of the feasibility and value of pharmacist prescribing of antimicrobials in secondary care in Scotland.
Methods Pharmacists' perceptions were explored using focus groups in five Scottish regions representing (a) urban and rural areas and (b) district general hospitals and large teaching centres. Senior hospital pharmacists, both prescribers and non-prescribers, working in specialities where antimicrobials are crucial to patient management, were invited to participate. A topic guide was developed to lead the discussions, which were audio-recorded and transcribed. The framework approach to data analysis was used.
Key findings Six focus groups took place and some emerging themes and issues are presented. Pharmacists believed that the feasibility of antimicrobial prescribing is dependent upon the patient's clinical condition and the area of clinical care. They identified potential roles and opportunities for pharmacist prescribing of antimicrobials. Perceived benefits included giving patients quicker access to medicines, reducing risk of resistance and better application of evidence-based medicine.
Conclusions Pharmacists feel they have a good knowledge base to prescribe and manage antimicrobial treatment, identifying possible opportunities for intervention. Roles within a multidisciplinary antimicrobial team need to be clearly defined.
Keywords antimicrobials; pharmacist independent prescribing; pharmacist supplementary prescribing; qualitative research; Scotland; secondary care

Exploring pharmacist prescribing in hospitals in Scotland, with a focus on antimicrobials.

Tonna, Antonella P.

Home / Outputs

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Abstract

This aim of the research was to explore pharmacist prescribing (PP) with a focus on antimicrobials, in hospitals in Scotland. A mixed-methods approach was used to collect, generate and synthesise data. A systematic review of peer-reviewed published literature on evidence-based roles for the pharmacist as part of an antimicrobial multidisciplinary team, identified roles for pharmacists within the teams but limited evidence relating to outcomes associated with these roles. Six qualitative focus groups, with 37 hospital pharmacists in 5 Scottish Health Boards, contextualised perceptions of barriers to, and facilitators of, implementation of PP in hospitals. Key themes were: perceived lack of pharmacy management support to take on a prescribing role and little strategic attention paid to PP implementation and sustainability. These issues were discussed in relation to PP in general and not only for antimicrobials. Participants perceived successful implementation of PP to be associated with factors including ward type and patients clinical condition. None of the pharmacists were prescribing antimicrobials and consequently further studies focused on PP in general. A scoping exercise, utilising various sources of information, reinforced findings from Phase 1; it highlighted the absence of any national or Health Board framework to support implementation of PP in secondary care in Scotland. Consensus-based research was undertaken, therefore, to provide guidance to facilitate service redesign involving PP in secondary care in Scotland. A Delphi approach undertaken with 40 experts, mainly in strategic posts, resulted in a high level of agreement in areas relating to succession planning, rather than role development; more variability was obtained in areas relating to future orientation of service, competencies required by prescribers and potential development of non-medical prescribing teams. The guidance was developed into a self-assessment toolkit providing an analytical strategy for implementation and role development of PP in secondary care. While the results and conclusions generated through this research need to be interpreted with caution, the data generated is an original contribution to the evidence base relating to PP.

Files

TONNA 2011 Exploring pharmacist prescribing
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Journal of Clinical Pharmacy and Therapeutics, 2014 doi: 10.1111/jcpt.12181

A cross-sectional survey of antimicrobial stewardship strategies in UK hospitals

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**School of Pharmacy and Life Sciences, Robert Gordon University, Aberdeen, and †Department of Medical Microbiology, Aberdeen Royal Infirmary, Foresterhill, Aberdeen, UK*

Received 8 November 2013, Accepted 23 April 2014

Keywords: **antimicrobial management team, antimicrobial stewardship, hospital**

The aim of the study was to describe the UK antimicrobial stewardship strategies, specifically the profile and activities of antimicrobial management teams, antimicrobial prescribing policies and methods of monitoring and feedback provided to prescribers on antimicrobial policy adherence.

All UK NHS hospitals (n=856) included in study

Cross-sectional study
Questionnaires sent out – 273 returned – around 33% response rate

Results will focus on pharmacy input into antimicrobial management teams

Table 3. Membership profile of AMTs ($N = 186$)

	Yes % (*n*)	No % (*n*)	No response % (*n*)
Consultant medical microbiologist	96·8 (180)	1·1 (2)	2·2 (4)
Specialist antimicrobial pharmacist	95·2 (177)	3·8 (7)	1·1 (2)
Infection control manager	60·2 (112)	16·1 (30)	23·7 (44)
Consultant in infectious diseases	52·2 (97)	25·8 (48)	22·0 (41)
Nurse	48·9 (91)	28 (52)	23·1 (43)
Consultant surgeon	31·7 (59)	38·2 (71)	30·1 (56)
Non-medical prescriber	25·3 (47)	40·9 (76)	33·9 (63)
Consultant paediatrician	19·9 (37)	44·6 (83)	35·4 (66)
General practitioner	12·9 (24)	53·2 (99)	33·9 (63)
Consultant obstetrician	10·2 (19)	51·1 (95)	38·8 (72)
Patient representative	5·9 (11)	59·1 (110)	34·9 (65)
Consultant in public health	4·8 (9)	54·3 (101)	40·9 (76)
Specialist public health pharmacist	2·7 (5)	59·1 (110)	38·2 (71)

AMTs, multidisciplinary antimicrobial teams.

Already way back in 2011 (when study conducted) acknowledgement of the important role of the specialist antimicrobial pharmacist

ACKNOWLEDGEMENTS

We would like to thank all respondents who completed the questionnaire. We would also like to thank the 4th year MPharm students involved in data gathering: Elaine Campbell, Cherith Chamberlain, Brian Clancy and Rebecca Connor.

Good quality data collection is possible as part of MPharm projects

Comparative Study > Int J Clin Pharm. 2015 Oct;37(5):776-81. doi: 10.1007/s11096-015-0114-3. Epub 2015 Apr 8.

Antimicrobial stewardship activities in hospitals in Ireland and the United Kingdom: a comparison of two national surveys

Aoife Fleming [1], Antonella Tonna [2], Síle O'Connor [3], Stephen Byrne [4], Derek Stewart [2]

Affiliations + expand

PMID: 25851503 DOI: 10.1007/s11096-015-0114-3

Results of comparative study indicate potential room for improvement in Ireland

HRB PhD Scholars Programme in Health Services Research

School of Pharmacy University College Cork

UCC

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Antimicrobial stewardship activities in hospitals in Ireland and the United Kingdom : a comparison study of two national cross-sectional surveys.

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**School of Pharmacy, University College Cork, Ireland. †Pharmacy Department, Bon Secours Hospital, Tralee, Ireland.

INTRODUCTION

- Antimicrobial Stewardship activities in hospitals aim to improve the appropriateness of antibiotic prescribing, reduce antimicrobial resistance and improve patient care.
- Best practice guidelines recommend that a multidisciplinary Antimicrobial Management Team (AMT) conduct activities such as surveillance, audit and feedback [1,2].
- In order to continuously drive improvement in Irish hospital Antimicrobial Stewardship it is important to benchmark performance with other countries.

AIM

- To compare the results of the antimicrobial stewardship in hospitals survey between Ireland and the UK, focusing on the profile and activities of the Antimicrobial Management Team (AMT).

METHODOLOGY

- Ethics for this study was granted by University College Cork Clinical Research & Ethics Committee & the Ethical Review panel of the School of Pharmacy and Life Sciences, Robert Gordon University, Aberdeen.
- The self-completion postal questionnaire was designed by the School of Pharmacy, Robert Gordon University, Aberdeen.
- Questionnaires, with reply-paid envelope & cover letter were issued to hospital pharmacy departments in Ireland and all UK National health Service hospitals. Two reminders were sent at fortnightly intervals to all.
- Responses were analysed using STATA® version 12.
- Chi squared tests were conducted to compare categorical data.

RESULTS

- The response rate in Ireland was 73% (51) and in the UK was 32.7% (226).
- In the Irish survey:
  - 15 private and 36 public hospitals responded.
  - Bed size ranged from <100 bed (24%), 100-249 (36%), 250-499 (30%) and >500 (10%)
- In the UK survey:
  - All hospitals were National Health Service (NHS)
  - Bed size ranged from <500 (47.3%), 501-999 (31.4%), 1000-1499 (13.7%) and >1500 (4.4%).

Table 1. Comparison of AMT membership and Antimicrobial Prescribing Policy presences and communication

Feature	Ireland	UK	
Presence of AMT	56% (29/51)	82% (186/226)	p < 0.001*
Antimicrobial Pharmacist on AMT	69% (20/29)	95% (177/186)	p < 0.001*
Consultant in Infectious Diseases on AMT	24% (7/29)	67% (97/145)	p < 0.001*
Infection Control Manager on AMT	55% (16/29)	60.2% (112/186)	p = 0.007*
Consultant Surgeon on AMT	24% (7/39)	45% (59/130)	p = 0.002*
Consultant Microbiologist on AMT	93% (27/29)	97% (180/186)	p = 0.331
AMT & Microbiology Department in the hospital	47% (24/51)	71% (159/224)	p = 0.001*
Antimicrobial Prescribing Policy	88% (45/51)	98% (222/226)	p = 0.001*
Dissemination of the policy via mobile phone	20% (9/45)	7% (16/229)	p = 0.006*
Policy update communicated via internet	64% (29/45)	92% (205/229)	p < 0.001*
Policy update communicated by healthcare professionals	60% (27/45)	71% (158/222)	p = 0.139

* = statistical significance, AMT = Antimicrobial Management Team.

- In Ireland and the UK the majority of AMTs: (p > 0.05 for all comparisons)
  - promote the appropriate prescribing of antimicrobials,
  - promote the use of narrow spectrum rather than broad spectrum antibiotics ,
  - encourage microbiological investigation and rationalisation, as well as reducing multi-drug resistant infections.
- The top three areas included in the Antimicrobial Prescribing Policy were the same in Ireland and the UK:
  1. Empirical treatment of common infections
  2. Surgical prophylaxis
  3. Gentamicin.

KEY MESSAGES:

1. **Fewer Irish hospitals (56%) had an Antimicrobial Management Team compared to the UK (82%).**
2. **Fewer Irish hospitals (69%) had an Antimicrobial Pharmacist on the team compared to the UK (95%).**
3. **Irish hospitals were less likely to audit antibiotic prescribing compared to UK hospitals.**

Table 2. Comparison of audit activities to monitor antibiotic prescribing

Activity	Ireland	UK	
Monitor volume of antibiotic prescribing	86% (36/42)	73% (162/222)	p = 0.080
Audit all antibiotic prescribing against policy	58% (24/41)	76% (169/222)	p = 0.019*
Audit restricted antibiotic prescribing	52% (22/42)	65% (143/222)	p = 0.140

* = statistical significance

Table 3. Comparison of feedback information provided by AMTs in Ireland and the UK.

Activity	Ireland	UK	
Feedback on antimicrobial prescribing to individual prescribers	25% (13/51)	33% (74/222)	p = 0.278
Feedback on antimicrobial prescribing to ward teams	29% (15/51)	62% (138/222)	p < 0.001*
Feedback on antimicrobial resistance	33% (17/51)	29% (66/226)	p = 0.56
Feedback comparing antimicrobial prescribing with similar institutions	24% (12/51)	24% (53/222)	p = 0.958

* = statistical significance

Hospital pharmacists comments on antimicrobial stewardship programs:

Key strategic issues:

"Electronic prescribing would make monitoring much easier and feedback immediate and effective in changing prescribing patters" (UK)

"I think we have a comprehensive antimicrobial stewardship which was identified as a role model in the South East as a role model and I can see the main strategy is to make sure all the trusts know how to implement DoH guidelines" (UK)
(*DoH* = Department of Health)

"despite repeated attempts to put an Antimicrobial Stewardship team in place it has not happened, We need a microbiologist to push things forward" (Ireland)

"meeting the challenge posed by emergent multidrug organisms"
"It will be difficult to progress programs without ring fencing of resources" (Ireland)

CONCLUSION

- Significant differences in Antimicrobial Stewardship Strategies were found between Irish and UK Hospitals.
- Irish hospital AMTs are less likely to have an antimicrobial Pharmacist on the AMT.
- Irish hospitals are less likely to conduct audits of the prescribing appropriateness of antibiotics and restricted antibiotics.
- Irish AMTs need to be supported to conduct audit and feedback activities in order to contribute the requirements of Antimicrobial Stewardship.
- Sufficient resources and expertise are required to optimise AMT activities in Irish hospitals.

REFERENCES

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2. Strategy for the control of antimicrobial resistance in Ireland Hospital antimicrobial stewardship working group. Guidelines for Antimicrobial Stewardship in Hospitals in Ireland. Health Protection Surveillance Centre 2009.

This work was funded by the Health Research Board in Ireland under Grant No. PHD/2007/16

Please send any comments to

This data collected in 2014 and published in 2015 – quick search did not identify any update

International Journal of Clinical Pharmacy (2020) 42:1261–1269
https://doi.org/10.1007/s11096-020-01042-z

RESEARCH ARTICLE

Views and experiences of community pharmacy team members on antimicrobial stewardship activities in Scotland: a qualitative study

Antonella Pia Tonna[1] · Anita Elaine Weidmann[1] · Jacqueline Sneddon[2] · Derek Stewart[3]

Received: 18 December 2019 / Accepted: 16 April 2020 / Published online: 16 August 2020

Abstract

Background It has been acknowledged and recognised internationally that the community pharmacy team has a major role to play in antimicrobial stewardship programmes, particularly regarding patient engagement. However, there is a paucity of published research on community pharmacy-based activities in antimicrobial stewardship, and views and perceptions of the community pharmacy team on their role in antimicrobial stewardship. *Objective* To explore views and experiences of community pharmacy teams across Scotland on antimicrobial stewardship, activities related to European Antibiotic Awareness Day, and a self-help guide to treating infection. *Setting* Community pharmacy, Scotland. *Methods* Qualitative, semi-structured in-depth telephone interviews were undertaken with a purposive sample of community pharmacy team members over a six week period between November and December in 2016. Interviews were audio-recorded, transcribed verbatim and data analysed thematically using the framework approach. *Main outcome measure* Views and perceptions of antimicrobial stewardship and European Antibiotic Awareness Day activities and role of the pharmacy team. *Results* Twenty-seven participants were interviewed—20 pharmacists, five pharmacy graduates completing their pre-registration year, and members of the pharmacy support team including two pharmacy technicians and one medicines counter assistant. They were working mainly in urban areas and across five regions of Scotland. Most were aware of antimicrobial stewardship but some were not familiar with the term. Participants identified roles for the community pharmacy team in antimicrobial stewardship including the importance of the pharmacy as a first port of call for self-care advice. Some participants, including pharmacists, showed lack of awareness of European Antibiotic Awareness Day; those who were aware thought it may not have the desired impact on educating the public. Most participants, irrespective of role within the team, were not familiar with the self-help guide but they perceived this as a useful resource for the pharmacy team. *Conclusion* The participants recognised and identified roles for the community pharmacist within antimicrobial stewardship. However, the lack of awareness of European Antibiotic Awareness Day shows a need for European Antibiotic Awareness Day tools and other materials to be more effectively disseminated and for more training to be provided.

Keywords Antimicrobial stewardship · Community pharmacy · European antibiotic awareness day · Qualitative methods · Scotland

Acknowledgements Students who have conducted the interviews: Ellie Gray, Kirsten Hendry, Ihram Iqbal, Sheena Mackillop, Derrick Sloan. Community pharmacy team members who agreed to be interviewed mainly in their own time.

Focus now on community pharmacy

Focus very much on EAAD – a topic very relatable to this week

Results are rather disappointing:

Little awareness of EAAD

Perceived to not have desired impact on the general public

However, most aware of importance of antimicrobial stewardship – though not all familiar with term and its meaning

Hence importance of training our undergraduates to make sure future healthcare professionals are prepared for challenges they are likely to face

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Awareness and understanding amongst a university student population of the 2016 Community Pharmacy Public Health campaign aimed at encouraging the responsible use of antibiotics

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Healthcare Improvement Scotland | SAPG Safeguarding antibiotics

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Awareness and understanding amongst a university student population of a Community Pharmacy Public Health campaign encouraging the responsible use of antibiotics

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1. Department of Pharmacy, Robert Gordon University, 2. Scottish Antimicrobial Prescribing Group, 3. NHS Lothian

Introduction

Antimicrobial resistance (AMR) is acknowledged to be one of the most significant threats to patient safety globally. (1) Educating the general public on the appropriate and responsible use of antibiotics is essential to address this issue. European Antibiotic Awareness Day (EAAD) is a European public health initiative held annually, aiming to raise awareness on how to use antibiotics in a responsible way ensuring their effectiveness for the future. (2) NHS Scotland has supported EAAD with resources since 2009 and from 2015, the campaign included posters (Figure 1) and leaflets targeting the public displayed in all community pharmacies. (3)

Method

A questionnaire was developed using the EAAD resource, a World Health Organization led study, and general literature on evaluation of communication campaigns. (3,4,5) It comprised: demographics; exposure to media campaign; awareness, knowledge and understanding of campaign; and student recommendations on how the campaign may be enhanced. Question types were a combination of closed, 5-point Likert scales and open response items. The draft questionnaire was piloted with academic and non-academic staff. The questionnaire was formatted electronically to allow easy distribution and anonymity of all responses. All students in all courses (undergraduate and postgraduate) in one Scottish university were emailed a link to the questionnaire, followed by two reminders. Data were collected over a 5 week period from November 2017. Data were analysed using SPSS version 21. Relevant ethical approvals were in place prior to data collection.

Figure 1: EAAD poster from 2016

Results

- 1358 responses were received of which 1143 (84%) were resident in Scotland, 73% were undergraduates and 63% female. 52 respondents (4.5%) had heard of EAAD and were predominantly healthcare students.
- 31 (2.7%) were familiar with posters advertising safe use of antibiotics as part of the EAAD campaign; mainly through posters in the local pharmacy.
- A higher proportion of respondents (24%, n=287) from healthcare related courses agreed about seeking self-care advice at their local pharmacy if they had symptoms of coughs or colds.
- The majority of respondents who thought that antibiotics should always be prescribed when suffering from a cold were studying a non-healthcare related course (5.4%, n=72).
- 881 respondents (77%) were not aware that their behaviour in taking antibiotics may influence future effectiveness.
- 115 respondents (9.5%) thought is was OK to store unused antibiotics for future use and 105 (8.6%) thought is was OK to share antibiotics with family and friends.

Conclusions

The research indicates that the majority of respondents were not aware of EAAD, had not seen the community pharmacy posters and had little understanding of why antimicrobial resistance is important. Those who had good awareness where more likely to be studying a healthcare related subject suggesting that AMR is covered within the curriculum or they are more receptive to health-related campaigns. The low response rate is a limitation of the study; however representation from all schools was obtained in the final cohort. Current approaches need to be revised for more effective dissemination of the EAAD message amongst the general public.

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4. WHO Collaborating Centre on Patient Safety. Infection Control and Improved Practices. Evaluation of Antibiotic Awareness Campaigns. 2016. Available at:

Quantitative results …
Data collected by our
MPharm 4th year students

Some thoughts from the participants

"If I knew what it [antibiotic guardian] was from the start!

"I don't know what antibiotics are."

"I think that children should be more aware at school and that adults should be made aware at the doctors or in presentations made at their work."

"I still don't know what this is, ie what it entails, therefore I wouldn't want liability and responsibility until I had more information to make a more informed decision and what factors would be required to encourage me to do this."

"I have not heard about this campaign (EAAD) in school despite being in School of Health Sciences so I think there is need for improved awareness creation with messages."

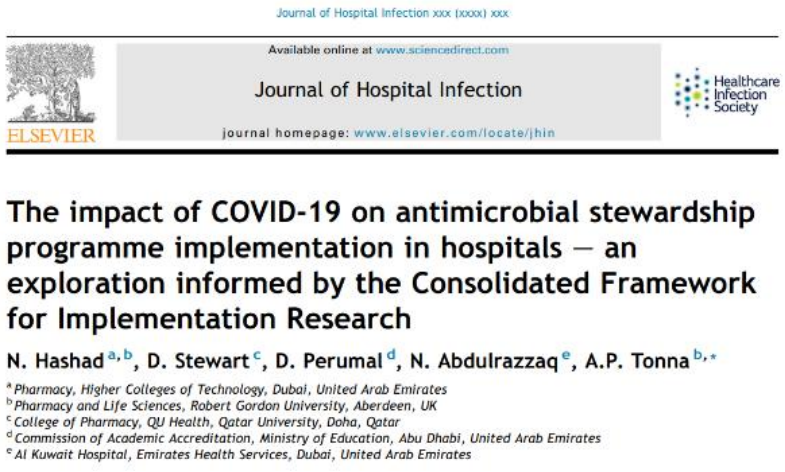
2nd Prize - Antonella Tonna: ENCOURAGING THE RESPONSIBLE USE OF ANTIBIOTICS: AWARENESS AND UNDERSTANDING AMONG A UNIVERSITY STUDENT POPULATION OF A COMMUNITY PHARMACY PUBLIC HEALTH CAMPAIGN IN SCOTLAND

Relevance and importance of this research may be seen by the fact that we were winners of the 2nd prize at the European Association of Hospital Pharmacists Congress, 2019, Barcelona

From over 1000 submissions, 11 short listed for prizes

Currently supervise PhD students who are researching aspects of AMS

For example, AMS in hospitals in specific regions of the world such as the GCC and during challenging times such as the pandemic ... completed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The impact of COVID-19 on antimicrobial stewardship programme implementation in hospitals – an exploration informed by the Consolidated Framework for Implementation Research

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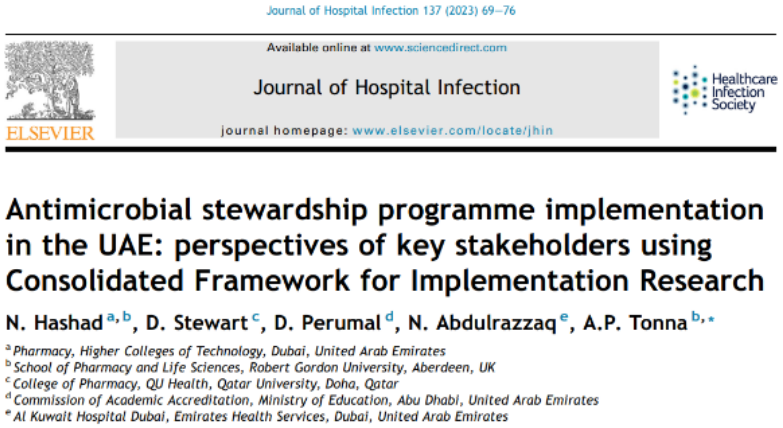
[d] Commission of Academic Accreditation, Ministry of Education, Abu Dhabi, United Arab Emirates
[e] Al Kuwait Hospital, Emirates Health Services, Dubai, United Arab Emirates


Journal of Hospital Infection 137 (2023) 69–76

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Journal of Hospital Infection

journal homepage: www.elsevier.com/locate/jhin

Antimicrobial stewardship programme implementation in the UAE: perspectives of key stakeholders using Consolidated Framework for Implementation Research

N. Hashad [a,b], D. Stewart [c], D. Perumal [d], N. Abdulrazzaq [e], A.P. Tonna [b,*]

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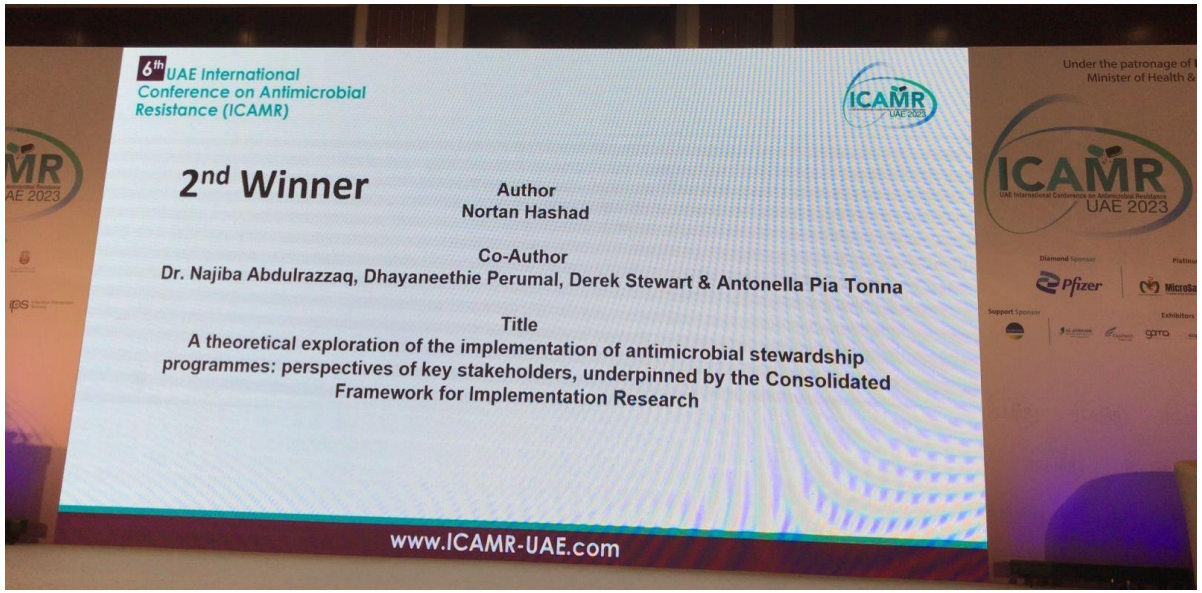
[e] Al Kuwait Hospital Dubai, Emirates Health Services, Dubai, United Arab Emirates

AMS related interventions by community pharmacists ... underway


Campus: Dubai Women Campus
Program: Pharmacy – Health Sciences
The impact of COVID-19 on antimicrobial stewardship implementation in UAE hospitals:
An exploration informed by the Consolidated Framework for Implementation Research (CFIR)
Introduction
Despite numerous published studies about antimicrobial stewardship programme (ASP) implementation, a lack of theoretical underpinning within this research emerges.[1] This leads to incomplete knowledge of contextual determinants impacting ASP implementation.
Aims
The aim of this study was to use Consolidated framework for implementation research (CFIR)[2] to explore key stakeholders' perspective regarding ASP implementation in United Arab Emirates (UAE) hospitals with a focus on facilitators and barriers.
Methodology
Research tool: Semi-structured online interviews. July 2020 – December 2020. Approximately 45 – 60 minutes
Interview schedule: Informed by CFIR and literature review.
Participants: ASP team members and other healthcare practitioners dealing with antimicrobials in UAE hospitals.
Recruitment: Purposeful followed by snowball sampling. Maximum variation of participants.
Data management: Audio recorded, transcribed verbatim and anonymised. Using NVIVO software
Data analysis: Independently analysed by two researchers
Results
A. Population (Figure 1)
B. Hospitals' demographics (Figure 2)
Sharjah N= 2
Fujairah N= 1
Dubai N= 3
Ras Al Khaimah N= 1
Abu Dhabi N= 4
8 governmental and 3 private hospitals Across 5 Emirates
6 Clinical pharmacist
3 ID physicians
2 Nephrologist
1 internist
4 pharmacist
3 ICU consultants
2 Microbiologist
1 GP physician
4 surgeons
3 Nurses
2 Quality officers
Main themes identified with examples of supporting quotes (Table 1)
Themes
Supporting quotes
"It halted everything, because we had to be pulled to cover the covid wards." [ID physician 1]
"Experience with ASP and having structure and having consultations and having meetings with different stakeholders really allowed us [to help in building national guidelines for COVID], a lot of the infectious disease people are clinical pharmacist and are actually quite solid." [Clinical pharmacist 2]
"For us as an ASP member in our facility, we provide a daily feedback for the doctor, especially in the Critical care area"
ICANS 2023


6th UAE International Conference on Antimicrobial Resistance (ICAMR)
ICAMR UAE 2023
Under the patronage of
Minister of Health &
2nd Winner
Author
Nortan Hashad
Co-Author
Dr. Najiba Abdulrazzaq, Dhayaneethie Perumal, Derek Stewart & Antonella Pia Tonna
Title
A theoretical exploration of the implementation of antimicrobial stewardship programmes: perspectives of key stakeholders, underpinned by the Consolidated Framework for Implementation Research
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PRAGUE SYMPOSIUM 2022
Polypharmacy and ageing
October 19 – 21, 2022

Research focusing on patient behaviours

WHY is this important?

Since understanding patient behaviours towards antimicrobials ensures that our interventions are tailored towards them and more likely to be effective ...
for example,
We want to explore and understand why people do not wash their hands after using the toilet ...

We can stand at the door and count how many people wash/do not wash their hands and produce descriptive statistics or compare groups ... does this help us understand behaviours?

We can culture a hand palm and see which bacteria are growing on the palm ... does this help us understand behaviours?

We can take the time to speak to people and ask what makes them adopt that behaviour

By understanding patient behaviours better, we can better tailor and adapt interventions.

Similarly we have applied this approach to understand behaviours of patients on long term IV antibiotics

We are researching OPAT – a very important part of antimicrobial stewardship programmes which has numerous advantages over patients staying in hospital for long periods of time

The research team was multi-disciplinary – professionals in practice: consultants, nurses, antimicrobial pharmacist Academics

The driving force behind this project was to determine why the number of patients opting for OPAT were much lower than other health boards

Open access Research

BMJ Open

Home self-administration of intravenous antibiotics as part of an outpatient parenteral antibiotic therapy service: a qualitative study of the perspectives of patients who do not self-administer

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To cite: Tonna A, Anthony G, Tonna I, *et al*. Home self-administration of intravenous antibiotics as part of an outpatient parenteral antibiotic therapy service: a qualitative study of the perspectives of patients who do not self-administer. *BMJ Open* 2019;**9**:e027475. doi:10.1136/bmjopen-2018-027475

► Prepublication history for this paper is available online. To view these files, please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2018-027475).

Received 29 October 2018
Revised 27 November 2018
Accepted 7 December 2018

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ABSTRACT

Objectives This study aimed to use a theoretical approach to understand the determinants of behaviour in patients not home self-administering intravenous antibiotics.

Setting Outpatient care: included patients were attending an outpatient clinic for intravenous antibiotic administration in the northeast of Scotland.

Participants Patients were included if they had received more than 7 days of intravenous antibiotics and were aged 16 years and over. Twenty potential participants were approached, and all agreed to be interviewed. 13 were male with a mean age of 54 years (SD +17.6).

Outcomes Key behavioural determinants that influenced patients' behaviours relating to self-administration of intravenous antibiotics.

Design Qualitative, semistructured in-depth interviews were undertaken with a purposive sample of patients. An interview schedule, underpinned by the Theoretical Domains Framework (TDF), was developed, reviewed for credibility and piloted. Interviews were audio-recorded and transcribed verbatim. Data were analysed thematically using the TDF as the coding framework.

Results The key behavioural determinants emerging as encouraging patients to self-administer intravenous antibiotics were the perceptions of being sufficiently knowledgeable, skilful and competent and that self-administration afforded the potential to work while administering treatment. The key determinants that impacted their decision not to self-administer were lack of knowledge of available options, a perception that hospital staff are better trained and anxieties of potential complications.

Conclusion Though patients are appreciative of the skills and knowledge of hospital staff, there is also a willingness among patients to home self-administer antibiotics. However, the main barrier emerges to be a perceived lack of knowledge of ways of doing this at home. To overcome this, a number of interventions are suggested based on evidence-based behavioural change techniques.

Strengths and limitations of this study

- A theoretical framework was used to underpin the research design and analysis.
- It was apparent that data saturation was achieved.
- The research was conducted within one only hospital in the northeast of Scotland; findings are not necessarily transferable to all outpatient parenteral antibiotic therapy clinics in the UK or beyond.
- The study focused solely on patient perspectives, and no members of the healthcare team were interviewed.

INTRODUCTION

Outpatient parenteral antibiotic therapy (OPAT) is a treatment option in patients who require parenteral antibiotic administration and are clinically well enough not to require an overnight hospital stay.[1] OPAT was first described in the USA in the early 1970s for treatment of infectious exacerbations of cystic fibrosis[2] and is now an option for management of diverse infections and patient populations. A model of care involves administration of intravenous antibiotics within the home setting (by a trained patient, carer or health professional).[2]

The expansion of OPAT worldwide has been driven by factors including: a drive for more cost-effective use of resources; reduced risks of healthcare acquired infection; alignment with the philosophy of patient driven care; an aim to achieve high levels of patient acceptability and satisfaction; and improved quality of life. Evidence of these outcomes has been derived from a systematic review of the cost effectiveness of OPAT highlighting that

Involvement on a national and international level with running of workshops on AMS ...
As can be seen great interest generated with more attendees that the room can hold!


Thank You