HEALTH SERVICES RESEARCH AND PHARMACY PRACTICE

Debate centres on whether pharmacy practice research has enough legs

The eighth annual Health Services Research and Pharmacy Practice conference took place in Leeds on April 11 and 12. Imogen Savage describes some of the highlights of the meeting

A motion that research has little influence on the development of pharmacy practice was the contentious topic debated at this year's Health Services Research and Pharmacy Practice conference.

Proposing the motion, Rob Pocock (MEL Research, Aston) argued that at present, practice research was wobbling about on one leg. It would continue to have limited influence unless it started to grow two more. "Pharmacy practice research is limited. It would be stronger with three legs. Adding research into policy, and the commercial imperative would make it much more effective."

He set out three factors that would influence getting research into practice. They were: Will the Government let it happen? Do pharmacists want to do it? Does it actually work?

To date, pharmacy practice research had taken the third factor as the most important one. But in fact the first two had much more influence on events.

"The real truth is that public service decisions are not rational and positivist. I think we practice researchers have a little influence, but not much. To have more influence, we need to understand political and commercial decision-making," said Mr Pocock.

The third research leg was really important because there was much more to understand about the commercial side of pharmacy practice and how this influenced the uptake of new services, or ways of working.

"Do practising pharmacists want to do it? We often forget that one," said Mr Pocock. "We have to get clearer insight into what motivates practising community pharmacists, their attitudes and their aspirations. The question of whether patients are healthier as a result of what we do is increasingly our focus. But the reality is that policy, and what pharmacists in business do, are both more dominant influences."

Speaking against the motion, Professor Clare Mackie (Robert Gordon University, Aberdeen) said: "To influence means to serve, to make change, to modify. The motion is dismissive. It is saying that we have no role. I am not saying research has had a major influence. Maybe one day it will. But we must recognise the contribution it has made to pharmacy practice."

As a student 20 years ago, she had been highly motivated by Gerry Shulman's work on patient medication records. Starting her preregistration training, she had been surprised to find that they did not exist in her pharmacy. She wrote to Mr Schulman and, with his advice, she set up a system and subsequently visited a large number of housebound patients. Some time later, one of the local GPs retired. His replacement found himself in the same situation as she had been: no written patient records. But his patients told him not to worry because "Clare's got my records". So he came to see her and asked if they could share them.

Leading edge practitioners were important catalysts for change. Researchers then provided the evaluation needed to sustain practice.

Seconding the motion Dr Jill Jesson (Aston university, Birmingham) reminded the audience that pharmacy practice research was based in the real world, which was complicated.

"Medicines management development depends on the commercial environment, or on Department of Health funding. In other words it fits into a political and a commercial timeframe," she said.

In Northern Ireland they had found that it was difficult to motivate pharmacists to deliver medicines management, partly because there was a 33 per cent additional cost.

Sometimes there could be good research evidence, but it had no effect.

In 1990 she had done some work with the Birmingham drug action team on needle exchange pharmacies. She had shown that distribution of services was based on pharmacist willingness, not client need. However, the research had not changed anything because the community drug teams had not really wanted pharmacists involved.

On the other hand, change could happen anyway, no matter what the research found. Her example here was the Department of Health-funded repeat dispensing pilot in Birmingham. This feasibility study had been difficult to manage, with seven pharmacies, five different PMR systems and two GP practices, each with different computer system.

"It was awfully muddled and we could not produce real evidence that the pilot scheme would make cost savings. But repeat dispensing is planned to happen, irrespective of the evidence," said Dr Jesson.

She was sceptical about the delusory rigor of randomised controlled trials in the pharmacy environment. Most practice research was naturalistic and uncontrollable. She believed that research does have a little influence. But change in practice would only happen if policy, commerce, and technical conditions all came together.

Seconding Professor Mackie, Dr Catherine Duggan (Barts and the London NHS Trust) said that national service frameworks promoted pharmacists' roles based on evidence. It was not always the best evidence but it was informing policy, which would ultimately affect practice.

It was not the role of research to control practice. Researchers were there to serve the profession. The motion represented "pharmacy in the dark ages".

After some debate, the motion was lost.

Target NSAIDs and aspirin to cut drug-related hospital admissions

Gastrointestinal bleeds in people on non-steroidal anti-inflammatory drugs and low-dose aspirin are a common and preventable cause of hospital admission, say researchers from Queens Medical Centre, Nottingham. Targeting GP prescribing of these drugs could have a significant impact on hospital admissions.

In a poster presentation, Rachel Taylor and colleagues described how medical admissions unit pharmacists had assessed patients admitted over a six-month period. Possible drug-related admissions were followed up, contacting patients and GPs for further details if necessary. Case reports were assessed by three independent assessors using pre-set criteria.

Data from nearly 4,000 patients had confirmed that 6.5 per cent of admissions to hospital medical wards are because of drug-related problems. Two-thirds of them (4.3 per cent) could be classified as preventable.

One of the most common preventable causes was use of NSAIDs and low-dose aspirin, which led to GI bleeding.

Drug-related problems also arose because of lack of monitoring for people on loop and potassium-sparing diuretics, antiepileptics and oral antidiabetic drugs. Adherence problems were linked to inhaled steroid therapy, antiepileptics, nitrates, loop diuretics and insulin treatment.

Targeting aspirin and NSAID prescribing, and adherence in asthmatics, epileptics and heart disease, could have the greatest impact, she suggested. Improving treatment monitoring in GP surgeries would also help, the researchers suggested.

Inadequate patient leaflets fail the EU user test

Three widely used patient information leaflets — for the "morning after pill" Levonelle and a branded (Adalat) and generic (Norton) nifedipine preparation — have failed a European Union-recommended user test. In the test, which is widely used in Australia, 20 potential users of a medicine are given a PIL and asked to find and explain 15 pieces of information. The testers must be people who could use the medicine concerned, but never have. The gold standard is a leaflet where 16 out of 20 people can find and explain all the points.

Mary Woodland and colleagues (University of Leeds) carried out the Levonelle test in 20 women waiting to see their GP. The women were the right age group for emergency hormonal contraception, but had not used it, and were not necessarily seeing the GP about it. Items they were asked to find included "how does the medicine work?" and "will it prevent all pregnancies?". The two nifedipine leaflets were tested in pharmacy customers aged over 65 years who were not taking nifedipine, but were on other medication. The items they were asked to find included "what side effects are common after starting nifedipine?".

"None of the leaflets came close to the target," Ms Woodland told the meeting on April 11. With the Levonelle leaflet, only three items were found and explained by at least 16 people. With the Adalat PIL, nine items were found by at least 16 people. The Norton leaflet did best, with 13 items found by at least 16 testers. Two people found and explained all 15 points.

In the test, people scored a mark for finding each point, and up to two marks for explaining it. The Norton leaflet scored significantly higher than the Bayer one for both finding and explaining, and users took less time to complete the test.

Ms Woodland said this could be linked to differences in layout: "The Norton leaflet used bullet points and colour. It looked nicer."

There was evidence of an education effect with all three leaflets: people with qualifications did better, and faster, than people without. This and inter-rater differences were possible sources of bias, and needed further work.

"Both projects show the inadequacy of information provided to patients," Ms Woodland concluded. "User testing of PILs is more than just a good idea."

RESEARCH ROUND-UP

NHS DIRECT INFORMATION POINTS IN PHARMACIES — A WASTE OF TIME?

Jessica Hardisty and colleagues (Nottingham University) explored public attitudes towards NHS Direct information points in four UK areas. Of 144 customers interviewed in four pharmacies, 85 per cent had not noticed the information point. Of those who had, over half did not know what it was for. Staff reported low usage of the points and no change in OTC sales, or requests for advice since they were installed.

PHARMACISTS UNSURE ABOUT ETP BENEFITS

Pharmacists in the first wave of electronic prescription (ETP) pilots can see benefits for others but are unsure what to expect for themselves. Sharon Phul and colleagues (Manchester University) sent a postal questionnaire to the 77 pharmacies taking part in the first wave and 64 pharmacists responded. Around half thought ETP would save GP time and cut patient waiting time in the pharmacy, but a third did not think it would save their own time. Many were unsure how ETP would affect them. A substantial minority (42 per cent) hoped ETP would help spread the dispensing load more evenly across the day.

BELFAST CONSUMERS "WILLING TO PAY" FOR MEDICINE RISK SERVICES

Quantifying the economic value of pharmacy services is important for the pharmacy profession. Grainne Crealey and colleagues from the Queen's University of Belfast reported a pilot study to measure consumers' willingness to pay for community medicines management services. Willingness to pay was assessed in a structured street interview with 101 people in Belfast shopping areas. Just over 30 per cent had a chronic illness and around half were currently taking at least three medicines. Nine per cent said they had had a drug-related problem in the past year. Most agreed that the pharmacist was an expert in medicines, but only one in five would ask the pharmacist rather than the doctor about a drug-related problem. The average "willingness to pay" for a reduction in risk of a drug-related problem was £18.60. Almost a third of people suggested £25 or more for a 20 to 30 minute consultation.

RISK CALCULATOR HELPS PATIENTS MAKE UP THEIR MINDS

A computer decision aid designed to help patients make up their minds about starting antihypertensive medication has been well-received by its users. Marjorie Weiss (division of primary care, Bristol University) interviewed 15 of the patients taking part in the SHARE trial, which is comparing different methods of giving people risk information. Several people changed their minds about taking tablets for life after using the aid, which uses patients' risk factors and presents a series of gambles or choices between treatment and the risk of adverse events. Some were made more aware of the need to take tablets. Others became more confident that they did not need medication because their risk was low.

PHARMACISTS RATE PIANA

Karen Rosenbloom and Dave Gerrett (Derby University) carried out a national postal survey of pharmacist perceptions of the five key areas for extended services, as defined in "Pharmacy in a New Age". The 1,182 pharmacists, sampled from the 1999 Register of Pharmaceutical Chemists, rated the management of prescribed medicines as pharmacists' most important role and promoting healthy lifestyles the least important. All sectors of the profession agreed on medicines management, but community pharmacists were less likely than hospital pharmacists to see supporting other health care professionals as important. Conversely, community pharmacists considered health promotion more important than hospital pharmacists.

AN EVIDENCE BASE FOR CHILD DOSES

There are ethical difficulties in doing traditional kinetic and dose-ranging studies in children, and many hospital drugs are used outside their licence. Professor James McElnay and colleagues from the Queen's University of Belfast and the pharmacy department at Alder Hey Hospital in Liverpool are using blood samples taken for other reasons, for example laboratory tests, to build a paediatric drug profile database. Levels of the drug are measured using "micro-analytic" techniques, and a profile built using sparse data analysis. To date researchers have collected enough data to describe the paediatric kinetics of diclofenac and ranitidine.

A HEALTH DEVELOPMENT RESOURCE

Researchers from Keele and Nottingham universities have completed a critical review of the international evidence on the contribution of pharmacy to health development. Professor Alison Blenkinsopp (Keele) said the review, now available on the Royal Pharmaceutical Society's website, found good evidence for smoking cessation, lipid management, supply of EHC and immunisation. Promising, but less-researched, areas included diabetes, anticoagulation monitoring, and weight reduction. Dr Claire Anderson (Nottingham) reported a survey of current and recent health promotion projects, which had found that UK activity focused on smoking cessation and sexual health. In contrast, topics in other countries included diabetes, weight, osteoporosis, alcohol use and travel health.