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Patient delivered partner therapy for chlamydia infection is used by some general practitioners, but more support is needed to increase uptake: findings from a mixed-methods study

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ABSTRACT

Objectives Patient delivered partner therapy (PDPT) describes the giving of a prescription or antibiotics by an index case with chlamydia, to their sexual partner/s. PDPT has been associated with higher numbers of partners receiving treatment. In Australia, general practitioners (GPs) previously expressed negative views about PDPT. Health authority guidance for PDPT has since been provided in some areas. We investigated recent use and perceptions of PDPT for chlamydia among GPs in Australia.

Methods In 2019 we conducted an online survey comprising multiple-choice and open-ended questions to investigate GPs' chlamydia management practices, including PDPT. Logistic regression identified factors associated with ever offering PDPT. A directed content analysis of free-text data explored GPs' perceptions towards PDPT.

Results The survey received responses from 323 GPs, 85.8% (n=277) answered PDPT-focussed questions, providing 628 free-text comments. Over half (53.4%) reported never offering PDPT while 36.5% sometimes and 10.1% often offered PDPT. GPs more likely to offer PDPT were aged >=55 years (adjusted odds ratio, AOR 2.9, 95%CI 1.4-5.8), worked in non-metropolitan areas (AOR 2.5, 95%CI 1.5-4.4) and jurisdictions with health authority PDPT guidance (AOR 2.3, 95%CI 1.4-3.9). Qualitative data demonstrated that many GPs recognised PDPT's potential to treat harder to engage partners but expressed hesitancy to offer PDPT because they considered partners attending for care as best practice. GPs emphasised a case-by-case approach that considered patient and partner circumstances to determine PDPT suitability. To alleviate medico-legal concerns many GPs indicated a need for professional and health authority guidance that PDPT is permissible. They also desired practical resources to support its use.

Conclusions GPs appear to accept the place of PDPT as targeted to those who may otherwise not access testing or treatment. Availability of health authority guidance appears to have supported some GPs to incorporate PDPT into their practice.

INTRODUCTION

Patient delivered partner therapy (PDPT) is a partner notification method where the diagnosing clinician provides an extra prescription/s or medication/s to their patient with chlamydia for their partner/s' treatment.(1) Despite PDPT effectiveness in treating more partners and reducing reinfection rates,(2) it is considered contentious because it provides medication without clinical consultation.(3, 4)

In Australia, general practitioners (GPs) have expressed negative views about PDPT and a need for clarification of PDPT permissibility.(3) Since 2015 health authority PDPT guidance has been provided in three of Australia's eight States/Territories(5) and it is noted in contact tracing guidelines(1) and STI policies(6) as an option for treating hard to engage partners of patients with chlamydia. In specialist services a PDPT offer was acceptable to patients.(7) Evidence about PDPT in Australian general practice is limited. We surveyed Australian GPs to explore use and perceptions of PDPT.

METHOD

In 2019 we conducted an online nation-wide survey exploring GPs' chlamydia management practices. A five-scale item *(always/mostly/sometimes/rarely/never)* asked the frequency GPs offered PDPT when managing patients with uncomplicated chlamydia, and open-ended questions asked views about PDPT ('*What factors might dissuade/support you in using PDPT? What circumstances do you offer PDPT?')*. GPs working in Australia were eligible and a convenience sample was recruited via GP-focused clinical, research and professional networks, social media and paid email invitations (Australian Medical Publishing Co). We aimed for a sample of 300 GPs allowing for 95% confidence intervals (95%CI) +/-5% around a proportion of 50%.

Analysis

We examined the proportion of GPs who reported offering PDPT often (always/mostly), sometimes (sometimes/rarely) or never. Factors associated with ever offering PDPT were investigated using univariable and multivariable logistic regression. Results are presented as odds ratios (OR) with 95%CI. We included age-group (categorised as <40, 40-54, >=55-years to approximate GP career stages), and binary variables for gender, additional training/education in sexual/reproductive health (SRH), practice area (metropolitan/regional), Australian medical degree, frequency of chlamydia testing (at least weekly) and availability of health authority PDPT guidance in their State/Territory. Variables associated with the outcome in univariable models were retained in multivariable models; excepting GP gender, as this may influence gender mix of patients and chlamydia testing patterns. Quantitative data were analysed using Stata-16 (Stata, College Station, Texas, USA).

Qualitative data were managed in NVivo Version-12 (QSR International Pty Ltd, Burlington, MA, USA). GP perceptions of PDPT were explored using directed content analysis;(8) a method often used in the context of prior theory or research on a topic. Based on prior work examining the chlamydia management context in general practice and GPs perceptions of PDPT(3), a priori coding framework guided the initial data analysis. Additional codes were developed as needed based on free-text data. Data presented below are organised by key overarching codes with example quotes followed by GP-ID-number, gender and the frequency (never/sometimes/often) they offered PDPT.

RESULTS

The survey received responses from 323 GPs; 85.8% (n=277) answered PDPT-focused question/s, providing 628 free-text comments. Almost half (47%) were aged <40 years, 72%

were female, 71% had an Australian medical degree, 68% were metropolitan-based, 32% had further SRH training/education and most (87%) organised chlamydia testing at least weekly (Table 1). Just over half (53.4%) never offered PDPT while 36.5% sometimes and 10.1% often did. A higher proportion of GPs from State/Territories with PDPT guidance offered PDPT (52.3%) compared with in other State/Territories (37.1%). Multivariable analysis showed GPs more likely to offer PDPT were aged >=55 years (AOR 2.9, 95%CI 1.4-5.8), worked in non-metropolitan areas (AOR 2.5, 95%CI 1.5-4.4) and State/Territories with PDPT guidance (AOR 2.3, 95%CI 1.4-3.9).

Table 1. GP characteristics associated with ever offering PDPT when managing a patient with uncomplicated chlamydia

		n (%)	OR	95%CI	AOR*	95%CI
Total		**277 (100)**				
Gender	Female	199 (71.8)	1.0		1.0	
	Male	78 (28.2)	0.8	0.5, 1.3	0.7	0.4, 1.3
Age group, years	<40	131 (47.3)	1.0		1.0	
	40-54	95 (34.3)	1.0	0.6, 1.7	1.0	0.6, 1.8
	55+	51 (18.4)	2.3	1.2 4.4	2.9	1.4, 5.8
Additional SRH training	No	189 (68.2)	1.0			
	Yes	88 (31.8)	1.3	0.8, 2.2		
Remoteness of area of practice	Metropolitan	189 (68.2)	1.0		1.0	
	Rural or regional	88 (31.8)	2.0	1.2, 3.3	2.5	1.5, 4.4
Health authority PDPT guidance in State/Territory	No	105 (37.9)	1.0		1.0	
	Yes	172 (62.1)	1.9	1.1, 3.1	2.3	1.4, 3.9
Organised chlamydia tests at least weekly	No	36 (13.0)	0.7	0.4, 1.3		
	Yes	241 (87.0)	1.0			

OR=Odds ratio; AOR-Adjusted Odds Ratio; SRH= Sexual and Reproductive Health

Qualitative results

Three overarching codes were identified regarding GP perceptions towards PDPT.

Balancing the benefits and risks of PDPT

Whether or not they practiced PDPT, many GPs acknowledged PDPT's potential to expedite partner treatment, prevent reinfection and improve patient/partner health outcomes. Benefits were weighed up against perceived risks. Many expressed hesitancy about PDPT, describing best

practice as assessing partner/s directly allowing a medical history, other testing, and preventive health education. A frequent concern was potential medico-legal implications (e.g. allergies, medication interactions) in prescribing for someone they had not assessed. Others were uncertain about their responsibility to partner/s: *"I would be worried where my duty of care starts and ends with the partner". (GP74-F, never-PDPT)* Some GPs were unaware of PDPT and others were adamantly opposed.

PDPT is better suited to some patients/partners than others

GPs described circumstances they had provided or would consider PDPT; particularly for patients considered high reinfection risk. Describing recent PDPT use, one GP said: "*[my] client said [their] partner would refuse to come in and we would not be able to provide an appointment around their work times. History was of monogamous relationship. My judgement was that my client would be at very high risk of reinfection if the partner delayed treatment." (GP224-F, sometimes-PDPT)*.

Many highlighted the importance of understanding the patient/partners' relationship, social situation, health literacy and ability to self-advocate. Some emphasised the notification method is the patient's choice: "*I am guided by the patient's confidence and desire to do this, and always give the patient a clear option that this is a choice and their partner/s can be notified in other ways. (GP287-F, sometimes-PDPT)* PDPT was viewed as unsuitable due to violence concerns, complex health/social situations, potential pregnancy, high STI risk or STI complications. Some GPs expressed concern about patient reliability in communicating PDPT to their partner(s), either unintentionally (e.g. intellectual, language barriers) or deliberately.

Making PDPT work in general practice

GPs identified factors that might support adopting PDPT into routine practice, particularly professional and health authority guidance articulating legitimacy of PDPT, "*I would be fine with it if it was sanctioned by RACGP* [Royal Australian College of General Practitioners] *and state department of health." (G236-F, never-PDPT*) The need for clarifying a GP's responsibility and education/training were all highlighted. Some GPs indicated it was simpler to offer PDPT for partners who were patients of their clinic, allowing them to check the history, allergies and medications. Many highlighted the need for patient/partner and clinic resources. Suggestions for streamlining PDPT provision included longer appointments, popup reminders, nurse involvement or phone consultations.

DISCUSSION

This study is the first to provide a quantitative measure of PDPT use by Australian GPs. We provide views from almost 300 Australian GPs, adding to limited evidence on this topic from outside the USA or non-specialist settings. While our findings suggest PDPT is not common practice, almost half our respondents had ever offered PDPT, and GPs working in States/Territories with PDPT guidance were over twice as likely than others to offer PDPT. Qualitative data demonstrated that GPs weighed up the benefits and risks alongside consideration of patient/partner/s circumstances to determine PDPT suitability. Professional and jurisdictional guidance were viewed as crucial.

A study strength is that collection of quantitative and qualitative data allowed us to consider PDPT use and the reasons GPs may or may not offer PDPT. The main limitation is this convenience sample's practices are unlikely to be representative of Australian GPs or GPs elsewhere. However, our respondents represented a range of age-groups, experience and practice locations across Australia.

Similar to an earlier study,(3) GPs articulated a need for clarity and guidance about PDPT permissibility. GPs working in jurisdictions with health authority guidance were more likely to offer PDPT, suggesting formal support facilitates GPs to undertake PDPT. Similarly, US clinicians were more likely to provide expedited partner therapy in states it was referenced in law than other states.(9) A recent study found that PDPT is potentially allowable under prescribing regulations for most Australian jurisdictions. Work is needed from health authorities in other jurisdictions to formalise support and clarify a clinician's duty of care to a patient's partner/s.(5) Furthermore, professional support for Australian GPs to confidently incorporate PDPT into practice is needed. Whether or not they practiced PDPT, GPs appeared to accept the place of PDPT as targeted to those who may not access testing or treatment. They emphasised PDPT be considered on a case-by-case basis and identified patient/partner circumstances suiting and contraindicating PDPT. Older and non-metropolitan GPs were more likely to offer PDPT, suggesting experienced GPs were more confident in their clinical judgement and access issues influenced regional GPs. Whereas, younger physicians in the USA were more likely to engage in PDPT.(10) The potential (11)for PDPT to treat harder to engage partners was weighed up against a preference for partners to be consulted directly. Similar hesitations about prescribing/providing medication for patients they have not evaluated have been expressed previously.(3) In the UK accelerated partner therapy offers a mechanism to clinically assess the partner via phone consultation.(4) Practical resources, work processes and funding for phone consultations are crucial to support PDPT provision.

CONCLUSION

Many GPs were hesitant regarding offering PDPT, but accepted PDPT as best targeted to those who may not access testing or treatment. Health authority guidance has supported some GPs to incorporate PDPT into practice. There is opportunity to build on progress for PDPT through

expansion of health authority and professional guidance alongside practical resources to support GPs to incorporate PDPT into routine care.

Key messages

GPs appear to accept the place of PDPT as targeted to those who may otherwise not access testing or treatment.

Health authority guidance in some jurisdictions has supported some GPs to incorporate PDPT into their practice and is warranted in other jurisdictions.

Professional support for GPs to confidently incorporate PDPT into practice remains lacking.

Practical support including funding for phone consultations is crucial to support GPs to undertake PDPT.

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Competing interests None to declare.

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