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"This has to end right now": An Interpretative Phenomenological Analysis of First Episode Psychosis and Suicidal Behaviour and

Clinical Research Portfolio

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Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology

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> > September 2017.

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Table of Contents

Chapter 1: Systematic Review	1
Risk and Protective factors for Suicidal Behaviour for individuals with First Epis	sode
Psychosis: A Systematic Review	1
Abstract	2
Introduction	3
Methods	5
Results	8
Discussion	
References	
Chapter 2: Major Research Project	
"This has to end right now": An Interpretative Phenomenological Analysis of Fin	rst Episode
Psychosis and Suicidal Behaviour	
Plain English Summary: A qualitative study of the experience of attempting suic	ide for
individuals with first episode psychosis	
Abstract	40
Introduction	41
Methods	43
Results	
Discussion	57
References	64
Appendix 1: Manuscript Submission Guidelines: Clinical Psychology Review	69
Appendix 2: Search strategies used	
Appendix 3: Risk of Bias Rating	86
Appendix 4: Example Sample of Completed Risk of Bias	
Appendix 5: Table A.1 Risk of Bias Ratings	89
Appendix 6: NHS Ethical Approval	90
Appendix 7: NHS R&D Approval	

Appendix 8: Participant Information Sheet	94
Appendix 9: Participant Consent Form	98
Appendix 10: Support Numbers for Participants	99
Appendix 11: Suicide Risk Screening Tool	100
Appendix 12: Sample of analysed script	102
Appendix 13: Sample superordinate theme and subtheme examples	104
Appendix 14: Clustering subthemes to generate superordinate themes	108
Appendix 15: Sample of memo writing	109
Appendix 16: Research Proposal	110

Chapter 1: Systematic Review Risk and Protective factors for Suicidal Behaviour for individuals with First Episode Psychosis: A Systematic Review

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Abstract

Introduction

Individuals with first episode psychosis (FEP) are at an increased risk of suicide and suicidal behaviour. Some risk factors for suicidal behaviour or death by suicide have been established, but research into protective factors for suicidal behaviour in FEP has been relatively neglected. This study is the first, to our knowledge, that systematically determines the risk and protective factors for suicidal behaviour in FEP.

Methods

A systematic search of EMBASE, PsycINFO and Medline was conducted. The risk and protective factors were extracted and risk of bias of the studies was assessed.

Results

24 studies were identified. Thirteen studies were rated as having a low risk of bias, 1 study had an unclear risk of bias and 10 studies were rated as having a high risk of bias. Risk factors identified in studies rated as having a low risk of bias were: a history of suicidal behaviour, mood factors to include hopelessness, history of substance misuse, history of sexual or physical abuse, illness related factors, treatment factors, poor premorbid functioning, premorbid personality traits and theory of mind impairments. One study hypothesised that coping and lower negative symptoms would be protective factors for suicidal behaviour but this was not supported in the study findings

Conclusions

The 13 low risk studies reported a number of risk factors that support previous research into risk factors for people at ultra-high risk of FEP. This review shows that the literature on protective factors for suicide in FEP is under- developed. Future research should use standardised measures of risk or protective factors and validated methods of recording suicidal behaviour in FEP. Future research should draw on established theoretical models of suicidal behaviour and investigate the treatment of established risk factors such as depression in FEP as a means of preventing suicidal behaviour.

Introduction

It is well documented that those with a diagnosis of psychosis are at increased risk of dying by suicide (Björkenstam, Björkenstam, Hjern, Bodén, & Reutfors, 2014). There is a high rate of suicide attempts among people with psychosis, with estimates varying between 5% (Melle et al., 2006) and 28% (Bertelsen et al., 2007). Variance in estimations may be for many reasons, including difficulties surrounding classification and diagnosis of first episode psychosis (FEP).

The risk of suicide and suicidal behaviour in first episode psychosis

In England and Scotland, the suicide mortality rate is 12 times higher (SMR=11.65; 95% CI, 8.73-15.24) for those with FEP than in the general population (Dutta et al., 2010). Birchwood, Iqbal, Chadwick, and Trower (2000) reported that in a 12-month follow up study, over half of their participants (61%) had experienced depression, hopelessness or suicidal thinking. The FEP emerges as the period for heightened risk of self-harm and/or suicide (Palmer, Pankratz, & Bostwick, 2005). Risk factors for suicide include active hallucinations and delusions, previous attempted suicide (Hor & Taylor, 2010), non-suicidal self-harm, negative life events (Fedyszyn, Robinson, Harris, Paxton, & Francey, 2012) and depression (Kjelby et al., 2015). A recent meta-analysis found that those who are at ultra-high risk (UHR) for developing FEP were also at risk of suicide and self-harm and that suicidal thinking and self-injurious behaviour were linked to suicide attempts for those at UHR (Taylor et al., 2015). The present study explores if these factors are also of interest for those with a FEP, but also to determine if there are any other risk factors for this group.

Protective factors and suicidal behaviour

Research into protective factors has been relatively neglected. Protective factors were previously conceptualised to be the inversion of risk factors (Montross, Zisook, & Kasckow, 2005). However, it is now recognised that good problem solving, effective coping strategies and overall life satisfaction are hypothesised to be protective factors (Montross et al., 2005). Research has shown that the stage of an individual's suicidality is important to consider when thinking about protective strategies (Gooding, Sheehy, & Tarrier, 2013). Namely, where along the suicidal continuum an individual is, in terms of being at the point of suicidal ideation, plans or actions (Gooding et al., 2013).

Sampling bias

Studies of suicide in psychosis are subject to selection bias, as many of those who die may do so before receiving a diagnosis. Therefore, first episode studies are necessary to reduce this source of bias. Studies of FEP lend themselves to a bias towards those who are in treatment and have received a diagnosis (Nielssen & Large, 2009). However, it can also be difficult to identify FEP, given the instability of diagnoses in the early course (Haahr et al., 2008). It is also possible that not all people with FEP are in contact with services and therefore their clinical history is unlikely to be recorded on death certificates making the study of completed suicide in FEP precarious (Nielssen & Large, 2009).

Defining terms

Due to the difficulties with defining FEP, it is possible that there is an underestimation of suicide risk for individuals during this time. This systematic review has been conducted given the clinical need to identify the exposure variables of risk and protective factors, in order to inform the development of preventative interventions for suicide for people with FEP. In reviewing these studies, risk of bias was also considered. This study is the first, to our knowledge, that has systematically determined the risk and protective factors for suicidal behaviour in FEP.

Research Questions

Three research questions were addressed:

- 1. What are the risk factors for suicide and suicidal behaviour in those diagnosed with FEP?
- 2. What are the protective factors for suicide and suicidal behaviour for those with FEP?
- 3. What is the risk of bias associated with the included studies?

Methods

Data extraction and selection of criteria of studies

A systematic review was conducted according to guidance set out in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher, Liberati, Tetzlaff, & Altman, 2009).

The following inclusion criteria were applied to the selection of studies. Study participants were of any age, identified as being in their first episode of psychosis. FEP was defined according to the definition in the Implementing the Early Intervention in Psychosis Access and Waiting Time Standard Guidance (NHS England, 2016). The importance of determining the first time a person experiences a combination of symptoms known as FEP, and the presence of positive and negative symptoms using structured clinical assessment was recognised in this definition.

To be included, studies had to report a clear outcome of suicidal behaviour defined as selfharm with a non-zero level of suicidal intent (Dhingra, Boduszek, & O'Connor, 2015) or death by suicide. In addition, they had to report on a potentially modifiable risk or protective factor as a predictor of suicidal behaviour (Cairns, Yap, Pilkington, & Jorm, 2014). Similar to an earlier review (Kazdin, Kraemer, Kessler, Kupfer, & Offord, 1997) a risk factor was defined as "an antecedent condition associated with an increase in the likelihood of the outcome of interest, while a protective factor is used to refer to an antecedent condition associated with a decrease in the likelihood of the outcome" (p. 63, Cairns et al, 2014).

The following exclusion criteria were applied. Papers focusing on 'at-risk mental states' for psychosis only were excluded. The following papers were also excluded: papers that were not published in the English language; studies other than those that were peer-reviewed; case studies; reports; review papers; book chapters; conference abstracts; unpublished studies.

Search terms

A computerised search was conducted using the following databases: EMBASE, PsycINFO and Medline. These searches were carried out from the commencement of the database to 15th September 2017. Subject headings and keywords were identified and used to search for the concepts displayed in Table 1. The results from these searches were combined with 'AND' and 'OR' (Appendix 2).

Concepts	Related search terms
Psychosis	Psychotic, FEP, schizophrenia, early, first, recent.
Suicide	Suicidal ideation, suicidal, suicide attempt, suicidality, parasuicide, suicidal behaviour, suicide intent, suicidal plan.
Risk factors	Risk factors, risk, risk reduction, risk measures, increased risk, predictive factors.
Protective factors	Protective factors, protection, protect.

Study Selection

Articles were systematically screened by reading the title and abstract to determine if they were eligible. The full article was read when relevant information could not be gleaned from the title and abstract (Figure 1).

Data extraction

The PRISMA statement suggests considering the risk of bias in studies that are included for systematic reviews (Moher et al., 2009). A methodological evaluation was undertaken to determine the risk of bias inherent in the included studies. Risk of bias was considered in six domains as outlined in Sanderson, Tatt, and Higgins (2007), namely selection, measure of risk and protective factors, measure of suicidal behaviour, design- specific bias, confounding variables and statistical methods.

In the first instance, each selected article was read in full and the following data was extracted: setting, diagnoses, age-range, total number of participants, follow up/observation period, number of participants at final follow-up, gender, control, rating of suicidal behaviour, risk factors, protective factors (including interventions), summary of main findings and rating of risk of bias. Papers were rated (Appendix 3) using criteria developed for observational studies in epidemiology in six domains (Sanderson et al., 2007)

and based on STrengthening the Reporting of OBservational studies in Epidemiology (STROBE) guidelines (von Elm et al., 2007). Each study was considered as 'high' 'low' or 'unclear' in each domain.

Risk of Bias ratings

All included papers were evaluated by the author (sample rating in Appendix 4). One quarter (N=7) of the included papers were purposively selected for second rating to determine inter-rater reliability. This evaluation was independently rated by a final year Trainee Clinical Psychologist. This resulted in 95% agreement rate with the disagreements resolved in a consensus meeting of both evaluators.

Results

Overview of included studies

The PRISMA flow diagram provides a summary of study selection (Figure 1). From a total of 7807 studies, 24 studies that met the inclusion criteria were included for final review. The reasons for excluding studies from the original searches were because the diagnosis of first episode of psychosis was not clear, studies were not addressing risk or protective factors or studies did not report on suicidal behaviour.





Table 2. Summary of study characteristics

Article	Setting,	Diagnoses; Age	Follow up /	Gender	Control	Rating of suicidal	Risk factors	Protective	Summary of main	Rating of
	Country	range;	observation			behaviour ¹		factors	findings	risk of
		Total number	period;							bias ²
		of participants	Number of							
			participants							
			at final							
			follow-up.							
Conus, Cotton,	Inpatient,	FEP- DSM-	Cross-	Male=	No.	Assessed using	Assessment of	Not reported.	Previous sexual	Low.
Schimmelmann,	Melbourne,	IV criteria. 15-	sectional	432,		ICD criteria.	history of past		and/ or physical	
McGorry, and	Australia.	29 years,	study.	female=			trauma, pre-		abuse associated	
Lambert (2010).		(mean= 22.0,		226.			treatment, baseline,		with suicide	
		SD= 3.4). N=					and outcome		attempts.	
		658.					characteristics.			
Levine, Bakst,	Psychiatric	Diagnosis of	Cross-	Male=	No.	Taken from the	Demographic	Not reported.	Females with	High.
and Rabinowitz	hospital	broadly	sectional	1444,		Israeli National	information.		suicide attempts at	
(2010)	admission,	defined	study,	female=		Psychiatric Case			admission who	
	Israel.	schizophrenia	admission	849.		Registry which is			were college	
		at first	between			a complete			educated and not	
		hospitalisation	1989- 1992			listing of			married were at	
		using ICD-9	and followed			psychiatric			increased risk of	
		criteria. Age	up until			hospitalizations			another attempt.	
		16-50 years.	1996.			in Israel using				
		N= 2911.	N= 2293.			ICD-9 criteria.				

Robinson et al.	Early	FEP-DSM- III	Cross-	Male=	no.	National Death	Sociodemographic	Not reported.	Previous self-	High.
(2010)	Psychosis	and DSM- IV	sectional,	200,		Index for deaths.	and clinical		harm, suicidal	
	Prevention	criteria.	mean 7.4	female=		The World	features,		tendencies,	
	and	15-30 years,	year follow	72.		Health	psychopathology		hopeless, being	
	Intervention	(mean=21.8,	up.			Organization	and mood		depressed and	
	Centre	SD= 3.4).	N= 282 at			(WHO) Life	measures.		alcohol use were	
	Mental	N= 282.	follow up.			Chart for			associated with	
	Health					suicidality.			suicide attempts.	
	Service,									
	Australia.									
Tarrier,	Inpatient and	Clinical	Cross	Male=	No.	Beck Suicidal	Social and	Not reported.	Longer illness	Unclear.
Barrowclough,	outpatient,	diagnoses of	sectional	45,		Ideation Scale.	recreational,		duration and	
Andrews, and	NHS, UK.	schizophrenia,	study.	female=			occupational,		higher level	
Gregg (2004)		DSM-IV		14.			relationships,		hopelessness	
		criteria,					parenting,		associated with	
		history of					homemaking, self;		risk of suicide.	
		illness of less					self-acceptance.			
		than 3 years,					psychotic			
		aged 18- 65					symptoms,			
		years (mean=					depression rating,			
		27.2, SD=					hopelessness			
		7.6).					measure, Insight			
		N= 59.					Scale, expressed			
							emotion.			

Falcone et al.	Child and	FEP; DSM IV	Retrospective	Male=	98	BPRS-C	Symptoms	Not reported.	Depressed mood	Low.
(2010).	Adolescent	criteria.	case- control	128,	patients	measure of	measured.		as a symptom was	
	In-Patient	Aged 12- 18	study over 3-	female=	admitted	suicidality and	'Other' risk factors		associated with	
	Psychiatry	years, (mean	year period.	72.	matched	interview with	measured from		suicidal	
	Unit,	of overall			by age,	parents/	assessments and		behaviour.	
	Cleveland,	sample not			gender	guardians and	medical notes.			
	USA.	available)			and	medical file				
		N= 200.			ethnicity.	review.				
					Mean					
					age=					
					14.9,					
					SD= 1.8.					
Fedyszyn et al.	Early	FEP, no details	Case- control	Male=	Half	Medical records-	Baseline	Not reported.	Recent negative	High.
(2012)	Psychosis	of diagnostic	study over 3	101,	sample	CAD-SAS	sociodemographic		events, and recent	
	Prevention	criteria, based	years.	female=	matched	applied to	information,		self- injurious	
	and	on clinical		79.	with 1	records.	baseline clinical,		behaviour	
	Intervention	interviews.			control,		past clinical factors		associated with	
	Centre	15-24 years,			half with		to include drug and		suicidal	
	(EPPIC).	(mean for			2		alcohol use, recent		behaviours.	
	Melbourne,	overall sample			controls.		factors to include			
	Australia.	not available)			Mean age		negative events,			
		N= 180.			of		insight, drug or			
					controls=		alcohol use,			
					19.81,		treatment non-			

					SD=		compliance.			
					2.77.					
Ayesa-Arriola et	Outpatient	First episode	Prospective	Male=	No.	Clinical records	Premorbid and	Not reported.	Depression and	Unclear.
al. (2015)	and in-	psychosis;	3- year	226;			sociodemographic		cannabis use	
	patient	DSM-IV	longitudinal	female=			variables.		associated with	
	Santander,	criteria;	study.	171.			Baseline clinical		suicide attempts.	
	Spain.	consideration	N= 397 at				factors, insight and			
		of	follow up.				neuropsychological			
		antipsychotic					measures.			
		medication								
		usage;								
		15- 60 years								
		(mean 28.94,								
		SD 9.46)								
		N= 397.								
Bakst,	Inpatient	First	4-year	Male=	No.	Multiple	DUP, demographic	Not reported.	Prior attempts or	Low.
Rabinowitz, and	New York.	admission	prospective	314;		sources- scales,	information, school		ideation, severity	
Bromet (2010a)		psychosis;	cohort study.	Female=		clinical	record information		of depressive	
		DSM-IV		215.		interview,	of		symptoms	
		criteria.	N= 357 at			medical records.	neuropsychological		and thought	
		Aged 15- 60	follow up.			Mortality using	testing, measures		disorder, lifetime	
		years (Mean =				National Death	of mood and		substance abuse	
		30.33, SD=				Index.	functioning.		associated with	
		9.99)							suicide attempts.	

		N= 529.								
Bakst,	Inpatient	First	4-year	Male=	N/A	Definition of	Premorbid	Not reported.	Poor pre- morbid	Low.
Rabinowitz, and	New York.	admission	prospective	265;		suicide attempt.	variables.		functioning	
Bromet (2010b)		psychosis;	cohort study.	Female=		Multiple			associated with	
		DSM- III and	N= 444 at	179.		sources- scales,			suicide attempt.	
		DSM-IV	follow up.			clinical				
		criteria.				interview,				
		Aged 15- 60				medical records.				
		years. (mean=								
		29.03, SD=								
		9.37).								
		N= 444.								
Bertelsen et al.	Inpatient and	Schizophrenia	Prospective	Male=	Two	Self- report.	Measures of	Not reported.	At one year,	Low.
(2007)	outpatient,	spectrum using	5-year	323,	treatment	Cause of death	adjustment and		suicidal plan was	
	Copenhagen,	ICD- 10	cohort.	female=	groups-	register and	functioning, socio-		associated with	
	Denmark.	criteria. No	Number at 2	224.	treatment	death	demographic		suicide attempt; at	
		exposure to	year follow		as usual	certificates.	factors, DUP.		2 years, a plan,	
		antipsychotic	up = 369, no		and		Treatment		depression or	
		medications	number for 5		integrated		adherence		suicide attempt in	
		exceeding 12	year follow		care.		medication use and		past year were	
		weeks.	up.				service use were		associated with	
		18-45 years,					determined using		suicide attempt.	
		(mean= 26,					medical records.			

		SD= 6.3)								
		N= 547.								
Björkenstam et	Participants	First diagnosis	Retrospective	Male=	N/A	National death	Psychiatric factors,	Not reported.	Past	High.
al. (2014)	information	of hospital	cohort. From	1632;		register.	familial factors,		hospitalisation for	
	taken from	treated	date of	Female=			social factors,		self-harm, history	
	national	psychosis,	discharge to	1187.			social welfare		of substance use	
	registers,	ICD criteria.	death or end				interventions,		disorder,	
	Sweden.	15-30 years	of study				social assistance		conviction for a	
		(mean= 22.6,	duration in				recipient,		violent crime and	
		SD= 3.6.	2008.				premorbid		having complete	
		N= 2819	N= 2819 at				intellectual		grades from	
			follow up.				functional level		compulsory	
							(and other risk		school increased	
							factors (head injury		the risk of suicide.	
							and obstetrical			
							complication)).			
Castelein et al.	Psychiatric	FEP or were	Retrospective	Not	N/A	Database and file	Clinical	Utrecht	Neuroticism and	High.
(2015)	institute,	evaluated for	cohort,	known.		searches.	characteristics, use	Coping List	suicide were	
	Groningen,	recurrent	between				of antipsychotics,	(UCL);	associated.	
	The	psychotic	2000-2009.				IQ measure.	presence of		
	Netherlands.	disorder not	N= 424 at				Personality traits	negative		
		diagnosed	follow up.				measure.	symptoms.		
		before; DSM								
		criteria.								

		Age range and								
		mean not								
		reported.								
		N=424								
Canal-Rivero et	Acute	First contact;	Prospective	Male=	No.	Interview using	Measures of DUP,	Not reported.	Symptom severity	Low.
al. (2017)	Psychiatry	DSM- IV	12- month	44,		SCAN –The	depression,		at illness onset,	
	Unit, Spain.	criteria, age	cohort. N=	female=		Schedules for	severity of		premorbid	
		14- 54 years	65.	21.		Clinical	symptoms, insight,		schizoid	
		(mean ±SD=				Assessment in	personality traits,		personality traits	
		26.17±9.53).				Neuropsychiatry.	substances, theory		and ToM	
		N= 65					of mind.		impairment were	
									predictors of	
									suicide attempts.	
Chang et al.	Outpatient	FEP; ICD-10	Prospective	Male=	N/A	Database search,	Measures of	Not reported.	Previous suicide	High.
(2015)	and	criteria.	3-year cohort	360,		definition of	positive and		attempt, history of	
	inpatient,	15-25 years,	study.	female=		attempt to	negative		substance abuse	
	Hong Kong,	(mean= 21.2,	N= 700 at	340.		include intent.	symptoms, severity		and poorer	
	China.	SD= 3.4)	follow up.				of illness,		baseline	
		N= 700					functioning.		functioning were	
									associated with	
									suicidal	
									behaviour.	
Clarke et al.	St John of	DSM-IV Axis	Prospective	Male=	No.	Clinical	Structured	Not reported.	Longer DUP was	Low.
(2006)	God and	I diagnoses.	4-year	99,		interview, Besier	measures of		associated with	

	Cluain	No data on age	cohort.	female=		Scale for suicide	symptomatology		suicide attempt.	
	Mhuire	range, (mean	N= 166 at	72.		during DUP.	and functioning			
	Family	age at	follow up.				using GAF, phases			
	Centre first	presentation					of illness using			
	episode	28.5 years).					Beiser Scale, DUP.			
	psychosis	N= 171.								
	study,									
	Dublin,									
	Ireland.									
Dutta, Murray,	Secondary	Diagnosis of	Retrospective	Male=	N/A.	National Offices	Clinical risk factor	Not reported.	A cumulative	Low.
Allardyce,	care,	schizophrenia,	cohort study.	1110,		and death	variables		threshold effect of	
Jones, and	inpatient,	schizoaffective	Participants	female=		certificates using	sociodemographic		symptoms was	
Boydell (2011)	outpatient,	disorder,	were traced	1022.		ICD codes for	factors, symptoms		associated with	
	any	psychotic	up to 40			suicide.	and clinical, drug		suicide.	
	psychiatric	mania or	years (mean			Cross checked	misuse, function,			
	service in	bipolar	13 years).			with case	insight and			
	London,	disorder,				records.	cannabis use.			
	Dumfries	psychotic								
	and	depression or								
	Galloway	'other'								
	and	were included;								
	Nottingham,	OPCRIT								
	UK.	criteria.								
		Age range not								

		reported, mean								
		age 36.1, SD=								
		17.3.								
		N= 2132.								
Gonzalez-Pinto	Psychiatric	First psychotic	Prospective	Male=	No.	National record,	Ratings of mood,	Not reported.	Depressive	Low.
et al. (2007)	ward, Spain.	episode, DSM-	5-year	75,		medical and	clinical variables,		symptoms at first	
		IV criteria.	cohort. N=	female=		forensic records,	demographic		presentation along	
		Age= 16- 61	83.	37.		direct interview.	variables,		with substance	
		years (mean=					substance misuse.		misuse were	
		28.86±10.27).							associated with	
		N= 112.							suicidal	
									behaviour.	
Harris, Burgess,	Inpatient and	Recent onset	Retrospective	Male=	No.	Suicides were	Socio-	Not reported.	History of	High.
Chant, Pirkis,	outpatient,	psychotic	cohort study	4623,		extracted from	demographic,		inpatient care,	
and McGorry	Victoria,	disorders	covering 8.5-	female=		registers.	clinical and		greater number of	
(2008)	Australia.	(excluding	year period.	3137.			treatment		treatment days per	
		disorders of					characteristics,		annum, shorter	
		organic origin)					Index of Relative		time to establish	
		using ICD- 10					Socio-Economic		diagnosis of	
		criteria. Aged					Disadvantage		psychosis were all	
		15-29 years,					score. Treatment		associated with	
		(mean= 22.6,					related variables,		suicide.	
		SD= 3.8).					clinical features			
		N=7760.					and patterns of			

							service use,			
							continuity of care.			
Klonsky, Kotov,	Inpatient,	First	Prospective	57%	No.	Augmented	Structured	Not reported.	Hopelessness as	Low.
Bakst,	New York.	admission	10-year	men		interview using	measures of mood		baseline, 6 months	
Rabinowitz, and		psychosis,	cohort.	(N=		SCID.	and hopelessness.		and 24 months	
Bromet (2012)		DSM- IV	Follow up,	236),					predicted suicide	
		criteria, age=	N=414.	43%					attempts between	
		15- 60 years,		female					24- 48 month	
		N= 628.		(N=					period.	
				178).						
Mitter,	The	FEP; DSM-IV	Prospective	Male=	None.	Team informed	Structured	Not reported.	Longer DUP,	High.
Subramaniam,	Singapore	criteria,	cohort study	710,		of suicides by	measures of		higher GAF	
Abdin, Poon,	Early	15-41 years,	over 2 years.	female=		family members	Positive and		disability score,	
and Verma	Psychosis	(mean= 27.7,		687.		or police.	Negative		higher PANSS	
(2013)	Intervention	SD= 6.6).					Syndrome and		positive items and	
	Programme.	N= 1397.					Functioning.		negative items	
							Duration untreated		were associated	
							psychosis.		with suicide.	
Robinson et al.	Specialist	FEP	Retrospective	Male=	No.	Suicide attempts	Demographic and	Not reported.	Longer time in the	Low.
(2009)	Early	mentioned in	cohort study.	434,		were categorised	diagnostic		service,	
	Intervention	title, DSM-IV		female=		according to	variables to include		premorbid GAF,	
	Centre,	criteria		224.		ICD- 10 criteria.	substance misuse,		past history of	
	Melbourne,	mentioned. No					premorbid and		sexual abuse, past	
	Australia.	total age					current functioning		suicide attempt,	

		given, N= 658.					and adjustment.		insight and	
							Duration of		polysubstance use	
							prodromal and		at entry associated	
							DUP, past		with suicide	
							diagnosis, trauma,		attempts.	
							symptoms at			
							baseline, severity			
							of illness, insight,			
							employment, home			
							status, treatment			
							characteristics.			
Sanchez-Gistau	Child and	First episode	Prospective	Male=	No.	Use of structured	Structured	Not reported.	Having a high	Low.
et al. (2013)	adolescent	psychosis,	24- month	73,		assessments.	measures of socio-		suicide risk	
	departments,	using PANSS	cohort.	female=			economic status,		(defined	
	Spain.	ratings, age 9-	N= 82.	37.			family history,		according to	
		17 years. N=					premorbid		ratings on the	
		110.					adjustment,		CGI-SS and	
							functional		HDRS) before the	
							impairment,		attempt was a risk	
							psychiatric		factor for a	
							symptomatology,		subsequent	
							mood, DUP,		suicide attempt.	
							insight, substance			
							and cannabis			

							misuse, IQ.			
Togay, Noyan,	University	Schizophrenia,	Prospective	Male=	No.	Self- report and	A number of scales	Not reported.	Higher BPRS	High.
Tasdelen, and	hospital,	- decided as	cohort study.	103,		family interview	were administered		scores, longer	
Ucok (2015)	Istanbul,	being in their	Duration of	female=			to assess		duration in	
	Turkey.	"acute phase",	follow up at	59.			symptoms,		hospital, lower 6-	
		DSM- IV	least 12				functioning,		month treatment	
		criteria.	months				Premorbid		compliance and	
		Accepted if no	(mean				Adjustment,		remission, higher	
		prior	59.3+/- 50				Childhood Trauma.		rate depot	
		psychoses	month, 12-				A battery of		medication	
		diagnosis or	198 month).				cognitive tests was		associated with	
		antipsychotic	N= 138 at				administered using		suicide attempts.	
		medication use	follow up.				well validated			
		of 15 days or					assessments.			
		less. Aged 15-								
		45 years, mean								
		age not								
		reported.								
		N= 172								
Verdoux et al.	Inpatient,	First	Prospective	Male=	No.	Clinical	Clinical,	Not reported.	Lower PANNS	High.
(2001)	Bordeaux,	admission;	2-year	40,		interview.	therapeutic and		positive score,	
	France.	DSM- IV	cohort.	female=			social outcome.		longer duration of	
		criteria, age	N= 59 on	25.					first admission,	
		16- 59,	follow up.						previous history	

(mean= 31.6,			of parasuicide and	
SD= 11.5).			substance misuse	
N= 65.			were associated	
			with suicidal	
			behaviour.	

¹Suicidal behaviour is defined as self-harm with a non-zero level of suicidal intent (Dhingra et al., 2015), or death by suicide.

² Studies were rated as having a high risk of bias if they had 2 (out of 6) or more areas of high risk, and unclear if they had 2 (out of 6) or more areas of unclear risk.

Overview of included studies

This systematic review included 24 studies that reported on 5,420 participants. Regarding study design, this systematic review contained 4 cross sectional studies, 2 case-control studies, and 18 cohort studies of which 5 were retrospective studies and 13 were prospective studies. The age range, where reported, was 12-65 years. When gender was reported, male participants out-numbered females. A range of risk factors were assessed within the articles, including the following: socio-demographic factors, mood-related factors, psychiatric symptomatology, insight, functioning, duration of untreated psychosis, illness duration, negative life events and abuse-related factors. The relevant risk and protective factors are first presented followed by a rating of the risk of bias for each study.

Duration of untreated psychosis and illness duration

Two studies reported an association between (longer) duration of illness and increased risk of suicidal behaviour (Clarke et al., 2006; Mitter et al., 2013).

Functioning

Four studies reported an association between functioning and suicidal behaviour. Poor premorbid functioning (Bakst et al., 2010b; Robinson et al., 2009) and poor baseline functioning (Chang et al., 2015) were found to be associated with increased risk of suicidal behaviour. The fourth study found that higher scores on the Global Assessment of Functioning (GAF) assessment (indicating better functioning) increased suicide risk (Mitter et al., 2013).

Mood-related factors

Eight studies found that mood factors were associated with suicidal behaviour. Six of these studies yielded evidence for an association with depressed mood (Ayesa-Arriola et al., 2015; Bertelsen et al., 2007; Falcone et al., 2010; Gonzalez-Pinto et al., 2007; Robinson et al., 2010; Sanchez-Gistau et al., 2013). Three studies highlighted the role of hopelessness as a risk factor for suicidal behaviour (Klonsky et al., 2012; Robinson et al., 2010; Tarrier et al., 2004).

Negative life events and abuse

Three studies found that negative life events (Fedyszyn et al., 2012) including a history of sexual abuse (Robinson et al., 2009) and a history of sexual and/or physical abuse (Conus et al., 2010) were associated with suicidal behaviour.

Protective factors

One study hypothesised that better coping and lower negative symptoms would be protective factors for suicidal behaviour but this was not supported in the study findings (Castelein et al., 2015).

Psychiatric symptomatology

Seven studies reported that individuals who were rated as having psychiatric symptomatology were at risk of suicidal behaviour. Specifically, these were an association between lower PANSS positive scores (Verdoux et al., 2001), and also higher PANSS positive items and negative items (Mitter et al., 2013). A cumulative effect of psychiatric symptoms was found to be associated with suicidal behaviour (Dutta et al., 2011). Increased symptom severity during hospitalisation was associated with a suicide attempt (Canal-Rivero et al., 2017). Also, increased scores on the Brief Psychiatric Rating Scale (BPRS) (Togay et al., 2015), thought disorder as measured on the Scale for the Assessment of Positive Symptoms (SAPS) (Bakst et al., 2010a) and insight (Robinson et al., 2009) were found to be risk factors for suicidal behaviour.

Substance misuse

Seven studies showed that issues around substance misuse were associated with suicidal behaviour. These related to having a history of substance misuse (Björkenstam et al., 2014; Chang et al., 2015; Gonzalez-Pinto et al., 2007; Verdoux et al., 2001), cannabis use (Ayesa-Arriola et al., 2015), alcohol use (Robinson et al., 2010) and polysubstance use on entry to the Early Psychosis Prevention and Intervention Centre where the study was conducted (Robinson et al., 2009).

Suicidal phenomena and self-harm

Nine studies reported other suicidal phenomena and self-harm were risk factors for suicidal behaviour. Recent self- injurious behaviour (Fedyszyn et al., 2012), a past suicide attempt (Bakst et al., 2010a; Bertelsen et al., 2007; Chang et al., 2015; Levine et al., 2010; Sanchez-Gistau et al., 2013), suicidal ideation (Bakst et al., 2010a), a suicide plan (Bertelsen et al., 2007), previous self-harm (Robinson et al., 2010) and hospitalisation for self-harm (Björkenstam et al., 2014) were all found to be associated with suicidal behaviour. Associations were found between suicidal tendencies (Robinson et al., 2010), a history of parasuicide (defined as any form of non-fatal deliberate physical self-harm regardless of the degree of suicidal intent) (Verdoux et al., 2001) and suicidal behaviour.

Experiences of services

Five studies reported an association between suicidal behaviour and treatment-related factors. Harris et al. (2008) reported that a history of inpatient care, greater number of treatment days per annum, shorter time to establish a diagnosis of psychosis were all associated with suicidal behaviour. Sanchez-Gistau et al. (2013) reported that those who had received treatment with antidepressants in combination with already having experienced severe depressive symptoms plus who had a history of a suicide attempt were most at risk of a repeated suicide attempt. A longer time in a clinical service (Robinson et al., 2009) and a longer duration of first admission to hospital (Verdoux et al., 2001) were reported as risk factors. Togay et al. (2015) reported that a longer duration in hospital, lower 6 month treatment compliance and remission, higher rate of receiving medication by depot injection were associated with suicide behaviour.

Other

The 'other' category included the association between suicidal behaviour and a past criminal conviction (Björkenstam et al., 2014) and having complete grades from compulsory school meaning the individual was able to progress onto second level education (ibid). The study by Castelein et al. (2015) showed an association between neuroticism and suicidal behaviour. Canal-Rivero et al. (2017) reported an associated between suicide attempts and those with premorbid schizoid personality traits and theory of mind impairments. Levine et al. (2010) reported that risk factors for females in their sample were being unmarried and receiving college education.

Risk of bias

In relation to the risk of bias, 10 studies were rated as having a high risk of bias, 13 studies as having a low risk of bias and 1 study was rated as having an unclear risk of bias. These ratings are presented in Figure 2 below (and Table A.1, Appendix 5). The risk of methodological bias was high overall, in relation to the research questions asked and particularly in relation to design-specific bias. Only one study hypothesised that protective factors may impact on suicidal behaviour (Castelein et al., 2015).

Figure 2. Risk of bias



Selection of study participants

Two studies were rated as having a high risk of bias as they did not report the diagnostic criteria (Fedyszyn et al., 2012) or did not describe how the person was assessed (Levine et al., 2010). Two studies were rated as unclear, as one study only mentioned first admission in the study title (Tarrier et al., 2004), while one study did not specify who made the diagnosis (Harris et al., 2008; The final 20 studies were rated as having a low risk of bias in this domain.

Measurement of exposure variable: risk factors/ protective factors

Six studies were evaluated as having a high risk of bias in their measurement of risk and protective factors. Of these, three studies did not routinely administer structured assessments (Björkenstam et al., 2014; Harris et al., 2008; Levine et al., 2010; while one study did not detail how they modified the assessment they utilised (Verdoux et al., 2001). One study acknowledged that their measurement of risk factors lacked specificity (Chang et al., 2015) while the remaining study relied on self-report measures (Mitter et al., 2013). The remaining 18 studies were rated as having a low risk of bias in this domain.

Measurement of outcome variables: suicidal behaviour

Eight studies were rated as having a high risk of bias in the measurement of suicidal behaviour. Two studies relied on self-report only (Chang et al., 2015; Robinson et al., 2010) while two relied on extracting data solely from an existing register (Harris et al., 2008; Levine et al., 2010). Another study included undetermined deaths (Björkenstam et al., 2014) and one study relied on police or family informants (Mitter et al., 2013). Two studies did not use standardised measures (Togay et al., 2015; Verdoux et al., 2001). Unclear risk of bias ratings were given for 4 studies. These 4 studies lacked detail on how the suicidal behaviour information was extracted, either by self-report, or use of existing medical information (Ayesa-Arriola et al., 2015; Conus et al., 2010; 2016; Robinson et al., 2009; Tarrier et al., 2004). The remaining 12 studies were rating to have a low risk of bias in this domain.

Design-specific bias

The highest frequency of high risk ratings occurred in this domain. All evaluations of high risk were due to the potential for interviewer or recall bias, based on how the information pertaining to risk and protective factors was measured. A list of the 16 high risk studies is shown in Table A.1 (Appendix 5). Four studies were rated as having an unclear risk of bias as it was unclear if the measurements of suicidal behaviour had been subject to inter-rater reliability or if more than one data source was used to extract the information (Canal-Rivero et al., 2017; Klonsky et al., 2012; Sanchez-Gistau et al., 2013; Tarrier et al., 2004) Four studies were not subject to design- specific bias and were rated as having a low risk of bias (Ayesa-Arriola et al., 2015; Bakst et al., 2010a, 2010b; Gonzalez-Pinto et al., 2007).

Methods to control confounding variables

All 24 studies were found to have a low risk of bias in this domain as there each study had the correct design and method of analysis.

Statistical bias

The risk of statistical bias was rated as low for 18 of the included studies. A high risk of bias was rated in 5studies. Three reasons for this rating were (i) because of a lack of statistical power (Castelein et al., 2015; Chang et al., 2015; Fedyszyn et al., 2012), (ii) a lack of stratification of subgroups (Mitter et al., 2013) or (iii) a lack of explanation of how the subgroups were classification (Togay et al., 2015). One study was rated as having an unclear risk of bias as the treatment of those lost to follow- up was not clear (Gonzalez-Pinto et al., 2007).

Discussion

This study is the first, to our knowledge, that has systematically determined the risk and protective factors for suicidal behaviour in FEP. Over half of the studies (N=13) were rated as having a high or unclear risk of bias. This limits the ease at which the findings can be generalised. In this section the findings across all of the studies will be discussed, however the findings related to the studies with a lower risk of bias are those that are given more credence.

Overview of included studies

Although all of the studies identified the country where the study was conducted, the ethnicity of participants was generally not reported. Follow-up periods in these studies varied. The participants within the included studies ranged in age from 12- 65 years. According to the definition used for FEP from the NHS England (2016), it is noted that the typical age of people experiencing a FEP is before the age of 35. It was noted that no study mentioned the developmental stage of participants as a potential risk or protective factor for suicide. In general, studies did not run analysis based on age of the included participants which may further limit the usefulness of the predictions made about suicide risk from this data.

Although the studies all mentioned risk or protective factors for suicidal behaviour in FEP, the overall risk of bias within these studies was high or unclear for 11 of the included studies. The high risk of bias within studies raises questions about the robustness of the ratings of suicidal behaviour and the methods used to measure the risk factors within the studies. Thirteen studies were rated as having a low risk of bias, which limits the generalisability of these findings.

What are the risk factors for suicidal behaviour in first episode psychosis?

In this review, based on the 13 studies rated as having a low risk of bias, a number of risk factors were identified. Of these studies rated as low risk, similar to previous research for people at UHR (Taylor et al., 2015), four studies showed an association between past and present suicidal behaviour. These studies (Bakst et al., 2010a; Bertelsen et al., 2007; Robinson et al., 2009; Sanchez-Gistau et al., 2013) reported that a prior suicide attempt, suicidal ideation and suicidal plans were risk factors for suicide attempts. While Sanchez-Gistau et al., (2013) found a high suicide risk rating for those who had a history of a suicide attempt before their psycotic episode, plus severe depressive symptoms and who

had recevied treatment with antidepressant medicaton. These findings are important, as it highlights the importance of comprehensively assessing past suicidal behaviour for people with FEP as it is a significant risk factor for another suicide attempt.

In relation to the studies rated as having a high risk of bias, similar to Taylor et al. (2015), these studies found an association between suicidal behaviour and self-injurious behaviour (Fedyszyn et al., 2012), self-harm (Robinson et al., 2010) and hospitalisation for self-harm (Björkenstam et al., 2014). Unsurprisingly, based on the studies rated as having a low risk of bias, this systematic review supports the claim that suicidal behaviour prior to first presentation to services puts people at increased risk for later suicidal behaviour (Taylor et al., 2015).

An important finding from the studies rated as having a low risk of bias is that depressed mood is predictive of suicidal behaviour (Bakst et al., 2010a; Falcone et al., 2010; Gonzalez-Pinto et al., 2007; Sanchez-Gistau et al., 2013). This association has been established for those at UHR, and is supported in this systematic review. The evidence base for the treatment of depression is well-established, and evidenced in the 2010 Scottish Intercollegiate Guidelines Network (SIGN)-Guidelines for the treatment and management of depression in adults. However, a previous Cochrane Review reported that there was mixed evidence for and against the application of Cognitive Behaviour Therapy for individuals with a diagnosis of schizophrenia (Jones, Cormac, Silveira da Mota Neto, & Campbell, 2004). Given the need for effective treatment of depression but the variability of evidence for those with schizophrenia, this study emphasises the need to develop and evaluate evidence-based treatments to address this. Similar to the study by Gumley et al. (2017) which showed promising evidence to support further research into third wave therapies such as Acceptance and Commitment Therapy (ACT) for Depression for those with FEP, further research is needed to look at interventions for depression in FEP as a means of preventing suicidal behaviour.

Four studies that were rated as low risk in this systematic review highlighted that a past history of substance misuse (Ayesa-Arriola et al., 2015; Bakst et al., 2010a; Gonzalez-Pinto et al., 2007; Robinson et al., 2009) is a risk factor for suicidal behaviour. Again, this finding is supported by a recent systematic review for UHR (Taylor et al., 2015). Increased input in the form of preventative measures to minimise the number of young people misusing substances might alleviate this risk factor, given the young age at which people present with FEP.

The remaining risk factors investigated in studies with a low risk of bias showed that the following risk factors were associated with an increased risk of suicidal behaviour: experiencing past sexual or physical abuse (Conus et al., 2010; Robinson et al., 2009), having had a longer time in services (Robinson et al., 2009), a longer duration of untreated illness (Clarke et al., 2006), and an association between the presence of psychiatric symptomatology (Bakst et al., 2010a; Dutta et al., 2011; Robinson et al., 2009) or increased symptom severity at illness onset (Canal-Rivero et al., 2017). Premorbid schizoid personality traits and impairment on a theory of mind measure were reported to be risk factors for suicidal behaviour also (Canal-Rivero et al., 2017). Hopelessness was found to be a risk factor too in one study rated as a having a low risk of bias (Klonsky et al., 2012) and one study rated as having an unclear risk of bias (Tarrier et al., 2004).

Of note here, is that two studies with a low risk of bias reported an association between poor premorbid functioning (Bakst et al., 2010b; Robinson et al., 2009) and suicidal behaviour. This finding is considered important, as one study (which is rated as having a high risk of bias) within this systematic review that contradicted this finding was Mitter et al. (2013) which found an association between higher GAF scores and therefore better functioning and suicidal behaviour. The result of the Mitter et al. (2013) study must be considered with caution, given the high risk of bias rating that the study was rated to have. In the study rated as having an unclear risk of bias, a longer illness duration (Tarrier et al., 2004) was also associated with suicidal behaviour.

Overall, based on the studies rated as having a low risk of bias, a myriad of risk factors are identified. These findings once again highlight the benefit of comprehensive assessments and using this information to guide formulation and treatment planning for this group of people.

The studies that were rated as having a high risk of bias generally reported similar findings to studies rated as having a low risk of bias. They also found some additional risk factors to be associated with suicidal behaviour: recent negative events (Fedyszyn et al., 2012), conviction for a violent crime and complete grades (meaning these individuals had grades which allowed them to access second level education) (Björkenstam et al., 2014),

neuroticism (Castelein et al., 2015) and a those who were concurrently female, unmarried, college education and a history of a suicide attempt upon admission to hospital (Levine et al., 2010). Given the high risk of bias within these studies, less weight is given to these risk factors, however they are important areas to consider when assessing people with FEP.

What are the protective factors for suicidal behaviour in first episode psychosis?

In the entire literature, this systematic review found only one study which hypothesised a protective factor of coping (Castelein et al., 2015) for suicidal behaviour. However, the study failed to find an association between higher scores on the measure used and suicidal behaviour (ibid). The absence of other protective factors in studies shows that the FEP and suicide literature is under-developed in this area.

Limitations of the current review

The present review should be considered in light of its limitations. This review was conducted using a risk of bias tool specifically designed to determine the level of risk in observational studies. Given the novelty of the study tool, it was not possible to consider all aspects of bias within studies that may have impacted on study quality. However, the six domains that were considered most relevant were included for rating.

There was a degree of subjectivity applied to the risk of bias ratings. For example, in considering the domain of participant selection, decisions were made to categorise studies that met the inclusion criteria as having a low risk of bias. However, these studies could have been rated as having a high risk of bias, given the reliance on data taken from medical records. This could reflect a poorly sampled population, given the reliance on those who present to services. This limitation is important when considering the generalisability of the study findings.

This systematic review rated 11 studies as having a high or unclear bias in their study design due to a lack of inter-rater reliability and the poor quality data that was reported in the studies. Similar difficulties have previously been found (Pompili et al., 2011). In summary therefore, the majority of the studies were regarded as being of questionable quality.

A final word of caution is advised about the methods used to define suicidal behaviour across studies. There was much variability across studies in how suicidal behaviour was determined; there was a lack of clarity regarding who extracted the data in some studies and an absence of definitions of suicidal intent. The need to consider suicidal behaviour across a continuum is recognised (De Leo, Burgis, Bertolote, Kerkhof, & Bille-Brahe, 2006). There is also a need to consider multiple sources of data, to avoid gross underestimations of suicide attempts, especially for those who do not present to services.

Future research

Future research should endeavour to apply standardised measures of risk or protective factors and validated methods of recording suicidal behaviour. Design-specific sources of bias should be considered to ensure the integrity of the study findings. Future research needs to provide data on age and developmental stage factors in suicide risk for those with FEP. Future studies could be conducted to consider the protective factors for those who are potentially vulnerable but who do not report suicidal behaviour. The evidence for interventions for reducing suicidal behaviour for those with FEP is limited. Research in this area could consider a preventative approach to suicidal behaviour in the form of investigating protective factors.

This systematic review revealed the paucity of studies that have evaluated the impact of theory-driven interventions on suicidal behaviour for individuals with FEP. Future studies should draw upon established theoretical models of suicidal behaviour such as the integrated motivational-volitional model (O'Connor, 2011). This area of study would benefit from future research determining the application of theory driven suicide-specific interventions for individuals with FEP. In addition, there is a growing evidence base to support the finding that feelings of shame, stigma and entrapment underpin depression in FEP (Birchwood et al., 2007). More research is required to understand the possible protective effect of compassion which has been demonstrated to reduce levels of shame for individuals with FEP (Braehler et al., 2013). In this way, we can determine if there is a modifiable link between underlying thought patterns and mood and thus prevent the incidence of depression, and consequently suicidal behaviour in FEP.

Conclusions

This study highlights the need for more high quality research to be conducted in the area of suicide risk and protective factors in people with FEP. If achieved, this may help to reduce the rates of suicidal behaviour for those with FEP.
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Chapter 2: Major Research Project

"This has to end right now": An Interpretative Phenomenological Analysis of First Episode Psychosis and Suicidal Behaviour

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Plain English Summary: A qualitative study of the experience of attempting suicide for individuals with first episode psychosis

Background

In 2015, 672 people died by suicide in Scotland. People who have mental health difficulties such as first episode psychosis are more likely to die by suicide than the general population. Asking people with first episode psychosis about their suicide attempt might help us to understand what led them to make an attempt. This information could be used to help other people who might be at risk of ending their lives.

Aims

This study aimed to understand individuals' experiences of making a suicide attempt. The researcher asked each individual what was happening in their lives before their suicide attempt, how their mental health difficulties might have impacted on them becoming suicidal, and how they coped after their suicide attempt.

Methods

Five individuals who had attempted suicide within the previous two years were asked about this experience. The researcher used a semi-structured interview guide and audiorecorded each interview. The data were transcribed and analysed using a qualitative technique called Interpretative Phenomenological Analysis.

Results

Three main themes emerged from the interviews: 1) Psychosis exposed self- evaluation: this theme explored how having psychosis impacted on how individuals thought about themselves and other people; 2) Psychosis triggered the suicide attempt: this theme explored participants' experiences of hallucinations; and 3) Increased awareness: this theme explored how participants became more aware of their thoughts after their suicide attempt and felt responsible for preventing themselves from experiencing psychosis again.

Conclusions

Participants described a range of experiences. It is hoped that this will help others to understand how to prevent suicide attempts in the future.

Abstract

Background

A disproportionate number of people with psychosis end their own lives in comparison to those in the general population. One of the risky times for this group is during their first episode of psychosis (FEP). This study interviewed individuals with FEP about making a suicide attempt. It also explored how individuals with a FEP made sense of their suicide attempt, what role, if any, their psychosis had in that experience and how they coped after their suicide attempt.

Methods

Participants were recruited from Early Intervention Services for individuals with FEP in the West of Scotland. Participants were those who had a diagnosis of FEP. Interviews were conducted using a semi-structured interview guide and the transcribed data were analysed using Interpretative Phenomenological Analysis.

Results

Three super-ordinate themes with inter-related subthemes emerged from the analysis. 1) Psychosis exposed self-evaluation: this theme explored how experiencing psychosis prompted participants to make self-evaluations. This shaped their perception of how others viewed them, and impacted on how they interacted with others. 2) Psychosis triggered the suicide attempt: this theme explored participants' appraisals of being out of control, their fear of their hallucinations and their belief about suicide as a means of protecting others. 3) Increased awareness: this theme explored how participants became more observant of their thought content following their suicide attempt as they viewed it as a way of preventing themselves from re- experiencing psychosis.

Conclusions

Central to participants' experience of suicide was how they evaluated and responded to their psychotic experiences. These accounts provide a rich insight into the experience of a suicide attempt for those with FEP and highlights implications for future research.

Introduction

It is estimated that there are approximately 1 million deaths worldwide each year as a result of suicide (Sinyor, Tse, & Pirkis, 2017). In 2015, 672 people died by suicide in Scotland (General Register Office for Scotland, 2015). Studies have shown that suicide most commonly occurs in people who have mental health difficulties compared to those in the general population (Ferrari et al., 2014). Furthermore, people with psychosis are at an increased risk of dying by suicide (Björkenstam, Björkenstam, Hjern, Bodén, & Reutfors, 2014; Taylor, Hutton, & Wood, 2015).

Rates of suicide for people with psychosis

It has been reported that 6% of those with schizophrenia take their own lives through suicide (Palmer, Pankratz, & Bostwick, 2005) with up to 32% of adolescents attempting suicide in their first episode of psychosis (Birchwood, Iqbal, & Upthegrove, 2005). A recent systematic review estimated the lifetime prevalence rate of suicide for those with schizophrenia at 5% (Hor & Taylor, 2010). These figures are stark, and when non-fatal suicidal behaviour is considered, the risk of morbidity increases. Research has found that between 5% (Melle et al., 2006) and 28% of people with psychosis had attempted suicide (Bertelsen et al., 2007).

Research on suicidal ideation and behaviour, and psychosis

To date, quantitative research in the area of psychosis and suicide risk, focused mainly on prevalence and risk factors. Research has shown that a high proportion of those with FEP experience depression (Addington, Addington, & Patten, 1998). For those with psychosis who develop depression, they report greater humiliation, loss, and entrapment related to their experience of psychosis than those with psychosis who did not develop depression (Birchwood et al., 2005). In one study, 80% of participants were reported to have experienced moderate depression over an 18-month period (Upthegrove, Marwaha, & Birchwood, 2016). Depression and hopelessness have been established as risk factors for suicidal behaviour in psychosis (Nordentoft et al., 2002). Dutta and colleagues (2012) investigated mortality among people with first contact psychosis in the London, Nottingham, and Dumfries and Galloway between 1965-2004. This study showed that there was a high mortality rate for people with first-contact psychosis. Although there have been advances in our understanding of suicide risk in psychosis, many gaps in our knowledge remain, in particular in respect of the course of suicidality in the early phase of psychosis (Upthegrove et al., 2010).

Given the paucity of such studies there was a call for more qualitative research in the field of suicidology (Hjelmeland & Knizek, 2010). Qualitative studies make a vital contribution to the suicide research landscape as they move away from an "explanations" driven means of research; they allow us to think critically about how we can inform our understanding of suicidality by learning from what people tell us about their experiences (Hjelmeland & Knizek, 2010). Indeed, one systematic review critiqued qualitative studies of the subjective experience of people who were suicidal, irrespective of psychiatric diagnosis (Lakeman & FitzGerald, 2008). This review identified 12 studies, which focused on various aspects of suicidality such as how people recovered from a suicide attempt. Although this is an important review of studies spanning a wide range of age groups and research sites, none of the studies involved people with psychosis. This is perhaps, unsurprising, as research suggests that the voice of those with psychosis is too often left out, and this is reflected in the paucity of qualitative research into the experiences of people with psychosis (Geekie, 2013).

Positioning the study

Interpretative Phenomenological Analysis (IPA) is a qualitative approach to research which aims to explore the meaning participants attach to their personal and social worlds, with an emphasis on the meaning of particular experiences in participants' lives (Larkin & Thompson, 2012). The researcher is permitted to become an active agent in the lived experience of the lives of the participants, through the reflective and subjective process involved in interpretation (Larkin & Thompson, 2012). There is a lack of understanding about how people with FEP experience their suicide attempt. This unique study is the first to explore the experience of a suicide attempt for people with FEP in Scotland.

Research Question

This study explored how people with FEP made sense of their suicide attempt, and what role, if any, psychosis had in that experience.

Methods

Design

This study used a retrospective qualitative design. Semi-structured interviews were designed, conducted and analysed using Interpretative Phenomenological Analysis (IPA).

Ethical Approval

Before commencement, ethical approval for the study was granted by the West of Scotland Research Ethics Service (16/WS/0193) and NHS Greater Glasgow and Clyde Research and Development Department and NHS Greater Glasgow and Clyde Research and Development Department (Appendix 6, Appendix 7).

Informed Consent

Participants received an information sheet (Appendix 8) outlining details of the study before being invited to participate. Before commencing the interview, participants were encouraged to ask questions. All participants provided written consent to participate (Appendix 9). Participants were reminded that they could finish the interview at any point and that if they chose to leave the study it would not impact on the clinical care they would receive from their specialist service. Participants gave consent for each interview to be audio recorded and transcribed by the researcher for analysis.

Potential Distress

The researcher was actively aware at all times of any potential distress which may have been caused through participation in the research. To safely manage this, all questions were asked in a sensitive manner and breaks were encouraged. Upon completion of each interview time was spent to ensure that participants were not distressed and to provide contact numbers for further support if required (Appendix 10).

Recruitment Procedures

Recruitment took place across four Early Intervention services for people aged 16-35 years of age who had experienced a first episode of psychosis in the West of Scotland. The study aimed to recruit those over the age of 16 years, who had a first episode of psychosis and who had made a suicide attempt between 3 months- 2 years before the time of interview. A suicide attempt was defined as a non-fatal, self-directed self-harming episode associated with some evidence of suicidal intent (O'Connor, Smyth, Ferguson, Ryan, & Williams,

2013). The categorisation of the attempt was made by the multi-disciplinary professionals within each service.

The study was open to all service users who met the criteria and who were competent in understanding English. Those who were acutely psychotic at the time, or those who were deemed not to have capacity, were not considered for participation in the study. Potential participants were those who met the inclusion criteria, and thus represented a homogenous and purposive sample as set out by Smith, Flowers, and Larkin (2009).

Each team considered their caseload during their weekly multidisciplinary team meeting to determine who would be eligible for participation. Often participants for IPA studies are purposively selected, therefore participants frequently are referred to studies by those who are familiar with the study's aims (p 49, Smith, Flowers & Larkin, 2009). Once a potential participant was identified, their keyworker contacted them with an information sheet about the study. The person was given a minimum of 24 hours to consider their participant, and if in agreement, consent was gained for the researcher to contact the potential participant. Upon contacting the participant, once verbal consent was gained, an interview time was arranged.

At the point of interview, the potential participants were advised that all quotations would be anonymised and participant socio-demographic information could be altered if required, to ensure anonymity, given the small sample size required for this study. Following the interview, all participants were contacted by their keyworker to offer support if required. Participants were recruited between December 2016 and June 2017.

The final sample for analysis consisted of five participants. It was not possible to recruit any more participants as all of the eligible potential participants in the Glasgow FEP services had been approached. It is recognised in conducting IPA that the sample size can be directed by the topic under investigation (Smith, 2007). In this sense, the topic of suicide was rare and no further participants could be recruited as the eligible pool of participants was exhausted. Following the guidance provided by Smith (2007), the researcher was satisfied that the sample size within this study generated rich data and there was a commitment to in- depth analysis and reporting of this data. Through this in-depth analysis, the aim was to produce A thorough examination of phenomena rather than generating a generalisable theory (Pietkiewicz & Smith, 2014; Smith, 2007; Smith et al., 2009). By focusing on a small sample size, data was analysed at a greater depth, thus allowing engagement with the data on an idiographic level (Hefferon & Gil-Rodriguez, 2011). Each interview was transcribed after being conducted. In this way, emerging patterns across the sample of five participants was recognised, while also acknowledging the presence of new information between transcripts. This is in keeping with standard IPA research methods, wherein the convergence and divergence of data within the sample was recognised (Smith et al., 2009). The idiographic nature of IPA makes it suitable for analysis of small homogeneous samples and so the sample size used in this study is in line with published guidance on the use of this research method (Smith et al., 2009).

Sample Characteristics

Given the small sample size and to protect anonymity, an overview of the characteristics of the sample is provided. Of the five participants included for analysis, all were male, white and Caucasian. All men resided in the West of Scotland at the time of the study. Participants ranged in age from 20 years to 27 years (average age of 23 years 2 months). At the time of recruitment, no participant was in full time employment. Two participants were currently engaged in, or taking time out from tertiary level education. The presence of a suicide attempt was confirmed during the interview procedure and all men were deemed by their referring team to have experienced a first episode of psychosis. The number of suicide attempts ranged from 1-3. All participants discussed attempts that had occurred 3-12 months previous. Each suicide attempt that was described by the men resulted in a hospital admission. For three of the participants, this admission was their first point of contact with mental health services, while the remaining two men attempted to end their lives while already being seen by mental health services. Participants described intentional acts of hanging, overdosing, cutting or purposely hitting themselves with force.

Procedure and Interview

Each interview was carried out by the researcher in the participant's Early Intervention mental health service in the West of Scotland. Interviews lasted between 42-64 minutes. A semi-structured interview guide was used to guide each interview.

This guide was devised according to IPA guidelines to address the main research aims (Smith et al., 2009). The guide was devised using themes identified in the literature and using guidance from the research team which included an IPA expert. The first interview in the sample was used as a pilot to test the guide for suitability. It was considered that no

changes were required to be made to the guide therefore the pilot interview was included for final analysis. The main areas of discussion in each interview were the experiences leading to participants being seen by their Early Intervention team, events and interpersonal relations before the suicide attempt, the impact if any of psychosis on the suicide attempt and recovery, if appropriate, since the attempt.

The interviews focused on eliciting the participants' lived experience, with probing questions being asked to encourage the participants to consider the individual meaning of their experiences.

Interview Protocol

Before the interview began, participants were encouraged to ask questions about the study. Most participants indicated that they were glad to be involved although some reported they were not confident in their ability to recall events in their entirety. This informal phase was important in creating rapport with participants. At the start of the interview, a risk assessment (Appendix 11) was conducted to ascertain the participant's suitability for inclusion and to identify any imminent risk of suicide. This assessment was repeated once the interview was completed. Each participant was provided with a list of support numbers (Appendix 10) and reminded that their keyworker would be in contact the following day to provide support if required. All participants were offered the opportunity to receive a copy of the final study.

Data Analysis

Data were transcribed verbatim by the researcher. The data were analysed using Interpretative Phenomenological Analysis. Guidelines for analysis as described by Smith, Flowers and Larkin (pp. 79- 108, 2009) were adhered to. An expert in IPA who was a member of the research team was consulted during this process. Consistent with J. A. Smith et al. (2009), the analysis took place in a number of stages:

- 1. Initial transcription.
- 2. The participant was placed at the core of the analysis via listening to the audio and re-reading of the transcript.
- 3. Initial note-taking, focused on the descriptive, linguistic and conceptual comments (Appendix 12).
- 4. Emergent themes were developed into discrete chunks (Appendix 13).
- 5. Themes were clustered and superordinate themes were developed (Appendix 14).

- 6. The process was repeated for the next transcript while maintaining a willingness to engage with any new themes. Memo writing was employed (Appendix 15).
- 7. Patterns were sought across interviews. Associated superordinate themes were linked to generate overall themes to support goodness of fit.

During the analysis phase, the researcher was mindful of limiting her exposure to the reading of suicide or psychosis related research. This was a purposeful action in order to avoid imposing theoretical meanings on the data during the analysis stages as described above. In doing so, it was hoped that the meanings of participants' experiences could be considered in depth, similar to that proposed by Yardley (2017).

Reflexivity

IPA acknowledges that the researcher's experiences might shape the analysis of the data (Smith et al., 2009)). To ensure reflexivity, the researcher wrote reflective memo's during the interview and analysis phases. An example of these memos is provided (Appendix 15) to give insight into the researcher's thoughts and feelings which arose during the research process and illuminate the research-participant relationship. This helped to ensure an objective stance was reached, and a "bracketing off" of assumptions (ibid). This process of bracketing has been viewed as useful during the analysis phase, as it can help to keep the participants' voices as the focus of the research, as opposed to using the voices of the participants to support the preconceptions of the researcher (Tufford & Newman, 2012).

I am a trainee clinical psychologist who has worked in the area of mental health for eight years. Through the course of my training, I have become familiar with psychological models and principles which have shaped my understanding of how acute distress is expressed. I have experience of delivering psychological therapy to those who are at risk of suicide and those who have had experiences which are often referred to as psychosis. Based on my professional and learning experiences, I agree with the idea that it's not what's wrong with you that matters; -it's what has happened to you that counts, and that these experiences impact individual's emotional distress across the course of one's life. I recognise that as a clinician I have a tendency to contribute to the resilience of those with whom I work through the application of psychological interventions. As a researcher I recognise my role is not to intervene but to generate an account of the participants lived experiences. To further ensure reflexivity, three research supervisors independently checked the emergent themes in a sample of data to verify the reliability of the analysis.

Results

Three superordinate and six related subthemes were constructed from the data.

A narrative emerged about how experiencing psychosis prompted participants to evaluate the thoughts they had about themselves. These evaluations shaped their perception of how they thought other people saw them and impacted on how they interacted with others. As their psychosis progressed, they described their thoughts becoming more out of control and they began experiencing auditory and visual hallucinations. These hallucinations appeared to be central to their decision to make a suicide attempt. Following their suicide attempt, all but one participant described an increased awareness of being observant of their thoughts and emotions in order to prevent a future deterioration in their well-being. Figure 1 represents how participants made sense of their experiences. Quotations are used to illustrate each superordinate theme.





Psychosis exposed self-evaluation

In this first superordinate theme, participants described how experiencing acute distress prompted them to evaluate how their thoughts and emotions impacted on them. These evaluations shaped their perception of how they believed others saw them. There was a prevailing sense that participants felt exposed, both in terms of being exposed to their own anxious thoughts regarding themselves, and being exposed to their own worries about being perceived negatively by others. These self- evaluations paved the way for a perceived distance between themselves and others; participants were indeed cynical and reluctant to trust those around them with the disclosure of their overwhelming feelings of distress prior to their suicide attempt:

"And like withdrew from everything and like didn't speak to my family and fell out with lots of people and like it just wasn't a very good situation" (Andy).

"I can't remember just being normal" (Dave)

All but one participant (Ed) spoke about evaluating how their thoughts and feelings impacted on them. Three participants described battling with underlying anxiety, which may have increased their vulnerability to experiencing acute distress. Barry had anxieties about his health that pre-dated his psychotic experiences, reporting that "*I've always been concerned about my health*". Dave also spoke about always feeling anxious, and that his anxiety increased on separate occasions when he was "*done*" (stabbed). He described not being able to "*remember just being normal*" since the onset of his psychosis:

"I've always been uncomfy and all that, see that way anxious and all that shite, paranoid a wee bit. Especially when I got done a few times. Means I got more paranoid. But I've always been anxious and that no really before I used to just go with the flow" (Dave).

Here, Dave talked about feeling "*uncomfy*" and "*anxious*" and equates it with "*shite*"- as something he could do without, conveying his annoyance with experiencing uncomfortable emotions. He was reluctant to quantify how suspicious he was of others before he was attacked ("*a wee bit*"), but he was definite that being attacked increased his distrust of others. He spoke about being able "*to just go with the flow*" when he was younger, suggesting that his anxiety didn't faze him because he had a tendency to physically fight with other people when he felt threatened by them. But Barry wanted to change how he was with others. Following his psychosis, he was more aware of his tendency to lash out.

His son was born during the onset of his psychosis and he now wanted to change and live a good life for his son.

"Thought I was God" (Callum)

In contrast, Callum described not feeling anxious. He spoke about being someone who realised after his psychotic episode that he always had a tendency to "*absorb a lot of people's habits*" and that "*I didn't even realise I was bipolar until the whole thing had finished*". Contrary to the other participants' experiences, Callum confronted suicide with a sense of curiosity and excitement. "*I thought I was saving everyone*". Callum recognised that he felt responsible for others' mortality and this impacted on his suicide attempt:

"I thought, amm..... it was like... I was, I was pure. It was, it was just like a... haha, I don't know. It was just like the cycle of life I guess" (Callum)

Callum was reluctant to express that he felt "*pure*", which conveyed that he might have felt embarrassed with the idea that there was a possible moral element to his suicide attempt. Callum spoke about "*the cycle of life*". But by attempting suicide, he was potentially disrupting this cycle as he sought to prematurely end his life. It is as if he wanted to cleanse himself of this life, a notion he returned to in a later theme. In making sense of this, it may be that he equated death as being the start, rather than the end of life:

"I was just always, just excited about the... the kinda aftermath. Like, we all come into existence having not existed. You just one day you, you're born, and you're aware and that's it. And then, 70 years later you're, you're dead again. And I just, I dunno. The unknown has always kinda fascinated me. And then I don't, I don't really know why. I don't know why. I dunno why it's in my head". (Callum)

For Callum, his excitement about the "*aftermath*" indicated that he anticipated life after death to be better than life as he currently experienced it. He summarised the complexity of life into discrete sections: you are born, you die. This hinted at the mundanity which he attached to his current life. But this over-simplification of life seemed hurried. Despite being young, he was not able to tolerate the idea of giving himself an opportunity to appreciate the complexities of this life. His speculation about the "*unknown*" suggested a desire to start over, to begin again. But this repetition of the phrase at the end of the quote *"I don't know why"* suggests an uncertainty about this. This may reflect a restlessness attached to reflecting on his decision-making at the time.

Psychosis triggered the suicide attempt

In this superordinate theme, all participants recognised a feeling of being out of control prior to their suicide attempt. During this time, all but one participant (Andy) reported using drugs. All participants reported experiencing hallucinations; seeing or hearing things or voices, that those around them didn't, experiences that intensified with drug use. All participants directly described that these experiences instructed them, or were interpreted in a way as to indicate that attempting suicide was the only option.

"Out of control" (Andy)

This subtheme reflects that participants felt incapable of exercising control over their thoughts. Participants wanted to stop their distressing thoughts. Andy described his confusion and fear about his state of mind prior to his suicide attempt:

"So, I felt like I was a passenger in the car and someone else was driving me. Completely like, it didn't feel like any of it was my decision. But obviously it was, it was me that you know, but, like, I think without the, the symptoms, i.e. the psychosis, without that, then, there wouldn't, it wouldn't have come to that I don't think." (Andy)

Andy's use of metaphor was striking in that he began by positioning himself as not being in control of his actions. He remembered a strong feeling of being compelled to do something, someone else was bringing him to his destination of suicide. It is as if he was utterly at the mercy of his voices. But in contradiction of this, he also described using his feelings to guide his decision. On this occasion, although he felt like something wasn't right, this feeling was not enough to stop him from making a suicide attempt. He had a polarised position regarding his decision-making as he acknowledged that it was "*me*". But it is too difficult to articulate what he did. His loss of words may have conveyed Andy's awareness of the stigma surrounding suicide, something he spoke about at length in his interview. He wanted to make it clear that without "*the psychosis*", it "*wouldn't*" have happened, noting the repetition to emphasise his point. But, he is unsure about this, indicating some self-doubt about what caused his suicide attempt. Barry and Callum too, experienced that their thoughts were out of control in the time preceding their suicide attempt. Barry described how this affected him while with his friends and father in the pub:

"And then, I got really freaked out so I went and sat with my Dad and then, I thought I heard people saying that they were going to eat me, ammmm, that they were going to kill me, and then, I, I left, I went home, and then, the next day, I went to go to work. I couldn't." (Barry)

Here, Barry gave insight into how fearful he was prior to his suicide attempt. He attempted to escape his voices by being in close proximity of his father. But even this was not enough to stop the voices. He recalled having to leave the situation, showing that he lost faith in even his father to protect him from such terrifying experiences. The fact that he was considering going to work may indicate how incongruent his coping responses were at that time. Despite feeling utterly terrified by his voices, he wanted to experience the familiarity of work. However, even though he wanted to go to work, he noted that "*I couldn't*".

"I followed the command" (Andy)

Apart from Andy, the other participants spoke about using drugs at this time: *"Ahh, if anything I smoked more [*cannabis]". (Ed)

For those taking drugs, (Barry was smoking cannabis and taking a health supplement that he felt contained a hallucinogenic substance that he was unaware of; Callum smoked cannabis; Dave "*had been taking shit for years*" but also started taking steroids again at the time) it seemed like their drug use intensified their experiences. With or without drug use, these additional auditory or visual experiences were interpreted as compelling evidence for all of the men to attempt suicide:

"I followed the command". (Andy)

There was a sense of morality about Barry, Callum and Dave's experiences. They recalled an understanding that they must die, in order to protect others from some form of harm:

"Soooo, I stayed in the house and then I heard like a snake rattle in my head. And it was telling me to either kill my Dad, kill myself, rape kids or go over to the, the, the church and be eaten. And then obviously I had to pick- you know, I'm going to kill myself." (Barry) There was powerful visual and auditory imagery in Barry's quote. The sound of the rattle snake, as if to signal to Barry that he is under attack, and to indicate the start of the onslaught of commands. There was a real sense that Barry believed he was being told to do the worst things he could imagine: kill, die, rape, be killed. His reluctance to speak about what might happen in the church might have reflected his fear about this. Prior to the onset of his psychosis, Barry had struggled with eating and was only eating raw fruit and vegetables. He was extremely self-critical about this. He believed that these changes led him to take health supplements, which he believed contained hallucinogenic properties that he was unaware of, and he believed that these drugs triggered his psychotic episode. It seemed logical to him "obviously", that when presented with the options, that he would obey this authoritative voice. However, it may also have indicated the activation of his moral understanding, knowing that it would not be moral to hurt others. Barry later described that a fear of the unknown made suicide seem like the only option. He was worried about what would happen if he had to pick one of the other options which would have challenged his moral reasoning:

"Cause I didn't know what would happen after, if I chose one of the options, what would happen after that". (Barry)

In contrast, Callum graphically described his first, and what he recalled as his most significant suicide attempt. He described being motivated to die:

"I thought aaaa I was like....am... I thought, basically I thought I aaaa, had to kill myself to go to the next level of existence. Ammm, so, I thought in order to get to that state I had to like almost like purge myself". (Callum)

After each attempt to purge himself, he described a sense of calm:

"And then just relax and breathe and have this overwhelming sense of like cleansing almost". (Callum)

Callum did not see another choice but to kill himself in order to progress to the next *"existence"*. One wonders if he believed this existence to be the experience of a spiritual afterlife, rather than the beginning of a new mortal life. It is as if he was performing a ritual

in his suicide attempt: purging-as if to eradicate, and cleansing-to exonerate. Given the spiritual tone of Callum's suicide attempt, it may be that he was trying to rid himself of evil, trying to reach a "*state*" or form of being where he was "*pure*". This juxtaposition of cleansing and purging gives insight into how compelled he felt to rid himself of his inner turmoil and be pure, relaxed and cleansed.

"This has to end right now" (Barry)

This subtheme explored the levels of distress participants attached to their psychotic experiences. With the exception of Callum, participants described reaching their tipping point. They described either viewing their experiences as constant, or experiencing them as progressively intensifying. The cumulative distress of these experiences coupled with the content of the auditory and visual experiences resulted in their suicide attempts:

"Just being fed up a everything that was going on. The videos, the arguing, smoking weed. Everything was just, couldn't be arsed with it". (Ed)

Ed continued to believe that he saw videos online that were about him and that he believed were derogatory in nature. Coupled with arguments with his parents, and "*smoking weed*", Ed reached exhaustion point and attempted suicide.

As mentioned previously, Dave's transition to the role of father was one which further motivated him to kill himself. He was worried because he was judging the content of his auditory and visual experiences as signs that he should hurt others. He feared that if acted on this, that his son would live with the stigma of having a "mad" and "dangerous" father for life and he didn't want to "mess his wee head up". By attempting suicide, he was hoping to protect his son. He was worried that if he was alive he would be a danger to others. He viewed his psychosis as changing who he was as a person, that he wasn't normal, and as a consequence he felt he was unable to continue to live life if he wasn't himself:

"And then I was thinking about the wean I'm like that- I'm gonna end up fucking his life up if I'm fucking... like this- fucked up. And I couldn't see myself being any different. So I was sick of it all really". (Dave) Callum's experience contrasted with the other participants, as he wasn't afraid to die. It wasn't about cumulative distress, he approached death with excitement:

"Usually when you think of suicide it's like melancholic and you just want to end it and you can't stand it but I, I'd, I was so excited about what was next". (Callum)

Here Callum talked about his assumption that society views suicide as being *"melancholic"*, almost in a lyrical sense where suicide happens because of despair and a desire to escape a distressing emotional state. Callum was keen to separate himself from this assumption, viewing himself as different because of his alternative emotional experience of excitement. This indicated Callum saw himself as different to other people, perhaps as having a unique role to play.

Increased awareness

In the final superordinate theme, participants that following their experience of psychosis, they believed that their thought processes and associated moods are different when they are under distress and that how they responded to this was important. With the exception of Ed, participants felt that if they paid more attention to their thoughts and feelings, that they might be able to prevent a similar psychotic episode re-occurring. Undeniably, for all participants, despite the extreme distress that they experienced during their psychotic episode, the greatest risk they posed was to themselves.

"Be aware of like, your inner workings" (Callum)

Andy, Callum and Dave described having a memory of how bad things were. This served to remind them to look out for warning signs of deterioration.

"It's fucking, that wasnae good, that wasnae good either. So thinking about it a lot kinda stops us, being like that you know what I mean?". (Dave)

Dave's expression of profanity provided emphasis on how bad things were. He thought that if he reflected on the difficult times, it would remind him of how bad things were and thus prevent a deterioration in his mental health. This revealed how much pressure he continued to put on himself, to stop himself, from a state of "*being*"- the stage where he can no longer separate his psychotic experiences from his sense of himself.

Finally, with the exception of Ed, participants described a desire to respond differently to their thoughts and moods. Barry, wondered what would have happened if he accepted his voices, rather than resisting them:

"That, I've always wondered that. If, if, I'd a kinda let my body go with it, not do what it was telling me, but just let my mind flow with it, instead of putting walls up and going like you know- get out, get out, get out of my head, kinda thing". (Barry)

Barry speculated about what would happen if he had let his "*body go with it*". There was a suggestion that he saw his body as less important than his mind; he was willing to sacrifice his body but not his mind. He described protecting his mind by constructing a fortress, because for him, his mind was invaluable. But he wondered what would have happened if he didn't do that, if he went with the "*flow*", suggesting a fluid state of letting the voices wash over him rather than battling against them. This suggested he had a sense of regret and a desire for his responses to be different, perhaps more carefree.

Discussion

This IPA study set out to make sense of participants' experience of a suicide attempt, in the context of FEP. Interviews were conducted and analysed using IPA and three superordinate themes were identified: psychosis exposed self-evaluation, psychosis triggered the suicide attempt and following their experience of psychosis participants were increasingly aware of their thoughts and feelings. Findings are discussed in relation to the existing literature, and the unique impact of this study is considered. The methodological strengths and limitations are discussed before considering future directions for research.

Key findings

In this study, interpretations of participants' suicidal experiences in the context of FEP provided rich insight into their lived experience. This study intended to stay close to the idiographic nature of the participant experience. In doing so, themes were clustered thus allowing patterns to form. These superordinate themes will be discussed further in the context of the existing literature.

Psychosis exposed self-evaluation

In this superordinate theme, upon experiencing psychosis, participants become more aware of deep-seated anxieties, and worries about being perceived negatively by others. Prior to their suicide attempt, these anxieties created a distance between them and other people. The combination of interpersonal distance and critical self-evaluations magnified their distress. The high expectations participants placed upon themselves in social situations prior to their suicide attempt is not a novel finding. Previous research has found that socially prescribed perfectionism was negatively correlated with positive future thinking (Hunter & O'Connor, 2003). A recent meta-analytic review supports the finding that social perfectionism makes up part of the premorbid personality of some people who attempt suicide (Smith et al., in press).

Participants in this study described pre- morbid anxiety and a fear of perceived criticism in social situations. The impact of pre-morbid social anxiety and the onset of paranoid thinking in psychosis have been identified in previous research (Michail, 2013). In this study, later in their psychotic experiences, the relationship between anxiety and perceived threat from others emerged more strongly for participants. This links with previous research which identified an associated between anxiety, and high levels of distress with persecutory delusions (Startup, Freeman, & Garety, 2007). A recent IPA study about

suicide in FEP found a similar theme of perceived intra and interpersonal vulnerabilities linked to participants' suicide attempt (Gajwani, Larkin, & Jackson, 2017).

In this study, one participant (Callum) described his suicide attempt differently to the other participants as he did not report anxiety prior to his suicide attempt. The enthusiasm with which he approached suicide, coupled with a positive spiritual belief in the allure of life after death was viewed as a potentially lethal combination. Previous research has found a pattern of intense spiritual experiences for people during a state of mania (Ouwehand, Wong, Boeije, & Braam, 2014). This contrasting experience highlights the importance of understanding anomalous suicidal experiences for those with psychotic episodes, regardless of the presence or absence of a comorbid diagnosis.

Psychosis triggered suicide attempt

Participants described a somewhat sequential process, whereby their thoughts became increasingly out of control, which may have been perpetuated further by drug use for some. In this study, at least two of the participants consumed numerous drugs and three participants reported the consumption of cannabis. Cannabis is an established risk factor for developing psychosis (Semple, McIntosh, & Lawrie, 2005). It is already known that for those with FEP, cannabis use is a risk factor for suicidal behaviour (Ayesa-Arriola et al., 2015). In this study, two participants acknowldged a history of using substances which is another risk factor for suicidal behaviour (Björkenstam et al., 2014; Chang et al., 2015; Verdoux et al., 2001).

These increasingly out of control thoughts could be seen as being the precursor for additional auditory or visual experiences, which are often referred to in the literature as hallucinations. This degree of thought disorder has previously been established in the literature as a risk factor for suicidal behaviour for those with FEP (Bakst, Rabinowitz, & Bromet, 2010). To our knowledge, this study is one of few studies (Zisook, Byrd, Kuck, & Jeste, 1995) where participants report a link between the content of hallucinations as providing volition for a suicide attempt.

A previous qualitative study of people with schizophrenia and suicidal ideation reported that in their sample, suicidal experiences were rare in the context of hallucinations (Skodlar, Tomori, & Parnas, 2008). This is not the experience of participants in this study, who all interpreted the content of their hallucinations as providing a rationale for attempting suicide. These command hallucinations have been identified as potentially the most dangerous experience for those with a diagnosis of schizophrenia, but the psychological processes that prompt individuals to act on command hallucinations are yet to be understood (Braham, Trower, & Birchwood, 2004).

All but one participant reported that these hallucinations, in tandem with feeling like they couldn't tolerate their distressing experiences anymore, provided the impetus for a suicide attempt. This supports previous research which showed that individuals experiencing persecutory delusions were more likely to have a fear of madness, which was associated with increased distress (Bassett, Sperlinger, & Freeman, 2009). In the present study, participants appraised this distress as constant or increasing in severity and consequently participants described having "*had enough*". Previous research reported that emotional intensity and delusions can sometimes exacerbate each other (Hutchins, Rhodes, & Keville, 2016). This is an important finding suggesting that a difficulty tolerating uncomfortable emotions within the context of command hallucinations may provide a basis for intervention building.

Taken together, these themes of negative self-evaluations, feeling out of control and the emotional consequences of hearing voices seemed to activate a suicide-enabling script. In this study, a novel finding was that participants viewed suicide as a means of protecting others from harm. There is no known research in the area of the impact of positive beliefs about suicide for people with FEP.

Increased awareness

This final superordinate theme described participant's increased awareness of their own thoughts following their psychotic experience. With the exception of Ed, the other participants described an awareness of their own thoughts following their suicide attempt and psychotic experience. They drew conclusions that they needed to respond differently to their inner world in order to prevent another psychotic experience. A recent IPA study showed similar findings where participants were asked to actually draw their experiences. The novel interpretation of their images showed that participants appraised a necessity to understand the "bad" in order to gain insight and adapt following their psychotic episode (Attard, Larkin, Boden, & Jackson, 2017).

Reflections on the research: strengths and limitations

One participant's transcript was not included in the final analysis due to difficulties categorising his experience as a suicide attempt. The difficulty of defining suicidal intent was an issue that arose many times during the early recruitment phase. In some cases, a person's self-harming experience was described as occurring at a time when they were not intending to cause themselves harm. This was an unforeseen barrier to recruitment and one which prompted much useful discussion within teams. Some potential participants agreed to participate but later retracted consent, for reasons unknown. The combination of recruitment difficulties resulted in a lower number of participants than expected being proposed for inclusion.

Despite the conservative sample size, the researcher was faced with navigating complex and dissimilar narratives. In conducting the analysis, the researcher acknowledged that there was a parallel process wherein the researcher was attempting to make sense of the participants making sense of their wider life and world. Due to the iterative and idiographic nature of the responses and the study design, generalisability of the findings was not an aim of the study.

During this study, it is evident that Ed's experiences are less well-represented in the results. Ed's interview was less rich in comparison to the other accounts. A reluctance in disclosure was common to all of the participants, but this initial reluctance diminished as the interviews progressed and they became more comfortable speaking about their lived experiences. However, for Ed, this reluctance did not pass. Ed's suicide attempt was the most recent, and he had only recently been accepted into the Early Intervention Service. As a result, he would have received less input from the team compared to other participants who were further along in their care journey. In comparison to the other participants, Ed maintained that the additional experiences he had prior to his suicide attempt were real. This belief may also have prevented him from elaborating on his experiences.

This study sample was homogenous in that all participants had experienced a first episode of psychosis and a suicide attempt. Participants' secondary diagnoses were not included in this study; however, one participant did refer to his diagnosis of bipolar disorder. His experiences were notably different but added a richness to the themes. All participants were from a sample of people who were receiving support from Early Intervention services and thus the themes that are generated do not add to our understanding of those who are at risk of suicide but are not known to health care providers.

Clinical Implications

This study has important clinical implications. Although similar themes emerged across participants' experiences, no participant uniformly described the same experience. With this in mind, it is important to use psychological formulation to guide therapeutic interventions when possible. In order to conduct psychological formulation, a thorough assessment is required. For example, four participants indicated that they had misused substances prior to their suicide attempt. This finding highlights the importance of assessing substance use history. With this in mind, the factors that may have increased the individuals' vulnerability to experiencing psychosis can be examined. This information can be used to deliver targeted interventions, such as that for substance misuse. Previous research has shown that interventions ranging from psychoeducation to cannabis- specific interventions are both effective in reducing cannabis use for people with FEP (Edwards et al., 2006).

In this current study, a key finding is that participants apportion pressure onto themselves to adapt and prevent a repetition of their psychotic experiences. This is important and could form the basis for interventions such as the current EMPOWER trial being conducted to deliver an intervention to prevent relapse and associated distress. This latter trial is underpinned by existing research which shows that a fear of reoccurrence may be linked to an increased risk of relapse (Gumley et al., 2015). The importance of monitoring fear of reoccurrence is cited, as it is shown to be a good indicator for detecting relapse (ibid).

Given the distress participants attached to their experiences, it is reasonable to consider the application of third wave therapies to help people to manage their distress. One such therapy that is gathering evidence is Mindfulness Based Cognitive Therapy (MBCT). Emerging evidence suggests that MBCT can facilitate changes in participants' perceptions and increase their understanding of themselves (Randal, Bucci, Morera, Barrett, & Pratt, 2016). In addition, Acceptance and Commitment Therapy (ACT) has been shown to have benefits for people who have experienced psychosis, given its utility in increasing mindfulness skills and reducing negative symptoms (White et al., 2011).

Across the themes participants described struggling to cope with the associated distress resulting from their appraisals of their experiences. It is recognised that those with FEP are what might be considered a hard to reach group. Despite this, these findings highlight the need to increase individuals' ability to manage their distress both during and after an experience of psychosis, especially those who are considered to be managing additional experiences known as hallucinations. Accumulating evidence for therapies such as MBCT and ACT indicate that there is scope for the application of these or similar psychological therapies to support people with this distress.

Implications for future research

Studies of suicide attempts and FEP are uncommon and the findings of this study highlight important areas for future research. In this study many participants noticed that experiencing psychosis changed their perceptions and that these evaluations of their thoughts and feelings impacted on how they interacted with others. Participants were clear that without their psychotic experiences, they would not have attempted suicide. This positions the psychotic experience as "different" to suicidal behaviour in the context of other mental health difficulties. In this study, it was the content of the additional auditory and visual experiences along with the difficulty tolerating the resultant distress that triggered the suicide attempt. More research is needed to understand this relationship, to determine what psychological mechanisms, if any, underpin this.

Finally, as previously mentioned, this sample of participants was taken from Early Intervention Services. As with existing studies of psychosis and suicide, there is a reliance on recruiting those already in services. Future research could identify those who do not present to services to determine their idiographic experiences. Finally, as previously mentioned, there is scope for further research to support individuals with FEP relating to their fear of relapse.

Conclusions

This study set out to explore, using IPA, the experience of a suicide attempt in the context of FEP. The findings show the need to listen to people who survive suicide, and to understand their individual experiences. In this way, person-centred care can be delivered that respects the complexity of the individual experience:

"Cause it's my mind [laughs]. You know what I mean like? Cause it's, it's, it's all you got really. If you lose your mind, like, what, what are you left with? Your body is useless if you've lost your mind". – Barry

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Appendix 1: Manuscript Submission Guidelines: Clinical Psychology Review



AUTHOR INFORMATION PACK

TABLE OF CONTENTS

•	Description	p.1	CLINICAI
•	Audience	p.1	REVIEW
•	Impact Factor	p.1	
•	Abstracting and Indexing	p.2	
•	Editorial Board	p.2	
•	Guide for Authors	p.3	
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Reference style

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Examples: Reference to a journal publication: Van der Geer, J., Hanraads, J. A. J., & Lupton R. A. (2000). The art of writing a scientific article. *Journal of Scientific Communications*, 163, 51-59.

Reference to a book: Strunk, W., Jr., &White, E. B. (1979). The elements of style. (3rd ed.). New York: Macmillan, (Chapter 4).

Reference to a chapter in an edited book: Mettam, G. R., & Adams, L. B. (1994). How to prepare an electronic version of your article. In B.S. Jones, & R. Z. Smith (Eds.), *Introduction to the electronic age* (pp. 281-304). New York: E-Publishing Inc.

[dataset] Oguro, M., Imahiro, S., Saito, S., Nakashizuka, T. (2015). Mortality data for Japanese oak wilt disease and surrounding forest compositions. Mendeley Data, v1. http://dx.doi.org/10.17632/xwj98nb39r.1

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Appendix 2: Search strategies used.

Embase 1974 to 2017 September 15.Search Strategy:

#	Searches
1	exp "schizophrenia spectrum and other psychotic disorders"/
2	((early or first or recent) adj3 (psychosis or psychotic)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
3	FEP.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
4	((early or first or recent) adj3 schizophreni*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
5	exp Suicide, Attempted/ or exp Suicide/
6	suicid*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
7	parasuicid*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
8	exp Risk/
9	exp Primary Prevention/
10	risk*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
11	(protect* or prevent* or predict* or factor*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]

12	1 or 2 or 3 or 4
13	5 or 6 or 7
14	8 or 9 or 10 or 11
15	12 and 13 and 14
16	limit 15 to english language
17	exp psychosis/
18	((early or first or recent) adj3 (psychosis or psychotic)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
19	FEP.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
20	((early or first or recent) adj3 schizophreni*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
21	suicidal behavior/ or suicidal ideation/ or suicide/ or suicide attempt/
22	suicid*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
23	parasuicid*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word]
24	exp risk/
25	prevention/ or protection/

26	risk*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer,
20	drug manufacturer, device trade name, keyword, floating subheading word]
	(protect* or prevent* or predict* or factor*).mp. [mp=title, abstract, heading word, drug trade name,
27	original title, device manufacturer, drug manufacturer, device trade name, keyword, floating
	subheading word]
28	21 or 22 or 23
29	24 or 25 or 26 or 27
30	17 or 18 or 19 or 20
21	28 and 20 and 20
51	20 810 29 810 50
32	limit 31 to english language
33	limit 32 to (article or "review")

Database(s):

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) 1946 to Present Search Strategy:

#	Searches
1	exp "schizophrenia spectrum and other psychotic disorders"/
2	((early or first or recent) adj3 (psychosis or psychotic)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
3	FEP.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
4	((early or first or recent) adj3 schizophreni*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
5	exp Suicide, Attempted/ or exp Suicide/
6	suicid*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
7	parasuicid*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
8	exp Risk/
9	exp Primary Prevention/
10	risk*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]

	(protect* or prevent* or predict* or factor*).mp. [mp=title, abstract, original title, name of
11	substance word, subject heading word, keyword heading word, protocol supplementary
	concept word, rare disease supplementary concept word, unique identifier, synonyms]
12	1 or 2 or 3 or 4
13	5 or 6 or 7
1/	8 or 9 or 10 or 11
'-	
15	12 and 13 and 14
16	limit 15 to english language

PsycINFO search strategy

#	Query	Limiters/Expanders	Last Run Via
\$17	S14 AND S15 AND S16	Limiters - Publication Type: All Journals; English Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO
S16	S9 OR S10 OR S11 OR S12 OR S13	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S15	S5 OR S6 OR S7 OR S8	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S14	S1 OR S2 OR S3 OR S4	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S13	(protect* or prevent* or predict* or factor*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S12	risk ^a	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S11	DE "Protective Factors"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S10	DE "Prevention" OR DE "Suicide Prevention"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S9	DE "Risk Factors"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S8	parasuicid*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S7	suicid*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S6	DE "Suicidal Ideation"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S5	DE "Attempted Suicide" OR DE "Suicide"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S4	(early or first or recent) N3 schizophreni*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S3	FEP	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S2	(early or first or recent) N3 (psychosis or psycholic)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO
S1	DE 'Psychosis' OR DE 'Acute Psychosis' OR DE 'Affactive Psychosis' OR DE 'Alcoholic Psychosis' OR DE 'Capages Syndramo' OR DE 'Chantino Psychosis' OR DE 'Capages Syndramo' OR DE 'Chaltinosa' OR DE 'Paranola (Psychosis' OR DE 'Postpartum Psychosis' OR DE 'Twaterive Psychosis' OR DE 'Schophenis' OR DE 'Smit Psychosis' OR DE 'Twaterive Psychosis' OR DE 'Schophenis' OR DE 'Smit Psychosis' OR DE 'Twaterive Psychosis''	Search modes - Boolean Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - PsycINFO

Appendix 3: Risk of Bias Rating

Domains based on Sanderson et al with defining	Supporting statement	Judgement.
criteria adapted from STROBE		
		Low
		High
		Unclear
		Oncical
1. Methods for selecting study participants:		
(a) Cohort study—Give the eligibility criteria, and the sources and methods of selection of participants		
Describe methods of follow-up		
<i>Case-control study</i> —Give the eligibility criteria, and		
the sources and methods of case ascertainment and		
cases and controls		
<i>Cross-sectional study</i> —Give the eligibility criteria.		
and the sources and methods of selection of		
participants		
b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed		
Case southal study. For matched studies, sive		
matching criteria and the number of controls per case		
2. Clearly define risk/ protective factors. Give		
diagnostic criteria, if applicable.		
For each variable of interest, give sources of data and		
details of methods of assessment (measurement).		
3. Clearly define suicidal behaviour. Give diagnostic		
cmena, n'applicable.		
For each variable of interest, give sources of data and details of methods of assessment (measurement).		
4 Design specific sources of bigs: recall bigs		
interviewer bias, loss to follow up.		
1		1

5. Methods to control confounding: appropriate design and/ or analytical methods.	
6.Statistical methods:	
Appropriate use of statistics for primary analysis of effect. Describe any methods used to examine subgroups and interactions.	
Explain how missing data were addressed.	

Appendix 4: Example Sample of Completed Risk of Bias

Domains based on Sanderson et al with defining criteria adapted from STROBE	Supporting statement	Judgement. Low
Study ID: Avesa- Arriola et al., 2015		High Unclear
1. Methods for selecting study participants: (a) Cohort study—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up Case-control study—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls Cross-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed Case-control study—For matched studies, give matching criteria and the number of controls per case	Quote: All referrals to PAFIP over 2001–2010 were screened with the following inclusion criteria: age 15–60 years; living in the catchment area; experiencing their first episode of psychosis; no prior treatment with antipsychotic medication or, if previously treated, a total life time of adequate antipsychotic treatment of less than 6 weeks; meeting DSM-IV criteria for brief psychotic disorder, schizophreniform disorder, schizophrenia, or schizo affective disorder. DSM-IV criteria for drug dependence and mental retardation and having a history of neurological disease or head injury were exclusion criteria.	Low
2. Clearly define risk/ protective factors. Give diagnostic criteria, if applicable. For each variable of interest, give sources of data and details of methods of assessment (measurement).	Quote: Premorbid and sociodemographic variables:; Premorbid social adjustment (PAS). Baseline clinical, insight and neuropsychological measures: Scale for the Assessment of Negative Symptoms (SANS) (Andreasen, 1983) and the Scale for the Assessment of Positive Symptoms (SAPS). General psychopathology was assessed with the Brief Psychiatric Rating Scale (BPRS) . Depressive symptoms were eval- uated using the Calgary Depression Scale for Schizophrenia (CDSS);The shortened version of the Scale to Assess Unawareness of Mental Disorder(SUMD; battery of neuropsych tests. Suicide attempts information: were taken from medical records by psychiatrist trainees (BVH and EGA) Comment: Information was obtained from patients, relatives and medical record	Low
 3. Clearly define suicidal behaviour. Give diagnostic criteria, if applicable. For each variable of interest, give sources of data and details of methods of assessment (measurement). 4. Design specific sources of bias: recall 	Quote: Suicide attempts information: were taken from medical records by psychiatrist trainees (BVH and EGA) Comment: unclear if information was cross checked.	Unclear
 bias, interviewer bias, loss to follow up. 5. Methods to control confounding: appropriate design and/ or analytical methods. 	clinical records Appropriate analytical methods- comprehensive range of assessments including predictors of outcome.	Low
6.Statistical methods: Appropriate use of statistics for primary analysis of effect. Describe any methods used to examine subgroups and interactions. Explain how missing data were addressed.	Quote: Description of groupings clear. Appropriate statistics, such as t-tests or the chi-square, were used. Multi variate analyses explored suicide attempt risk factors by entering the significant variables from the above analyses into binary logistic regression models. Due to multicollinearity, previous suicide attempts and living status were not considered.	Low

Appendix 5: Table A.1 Risk of Bias Ratings

Study design	Authors	Selection of study participants	Measuring exposure variable- risk/protective	Measuring outcome variable- suicide	Design specific bias	Methods to control confounding	Statistical bias
	Conus et al., (2010)						
s onal es	Levine et al., (2010)						
Jros ectio tudi	Robinson et al., (2010)						
	Tarrier et al., (2004)						
nse- ntro adie	Falcone et al., (2010)						
st c C	Fedyszyn et al. (2012)						
	Ayesa- Afriola et al., (2015)						
	Bakst et al., (2010a)						
	Bakst et al., (2010b)						
	Bertelsen et al., (2007)						
	Bjorkenstam et al., (2014)						
	Castelein et al., (2015)						
s	Canal-Rivero et al., (2017)						
udie	Chang et al., (2015)						
rt st	$\frac{\text{Clarke et al., (2000)}}{\text{Dutte et al., (2011)}}$						
oho	Dutta et al., (2011)						
0	Horris et al. (2008)						
	$\frac{11}{1000} \frac{11}{1000} \frac{11}{1000} \frac{11}{1000} \frac{11}{1000} \frac{11}{1000} \frac{11}{10000} \frac{11}{100$						
	$\begin{array}{c} \text{KIOHSKy Ct al., (2012)} \\ \text{Mitter et al. (2012)} \end{array}$						
	$\begin{array}{c} \text{Ivinuel ct al., (2015)} \\ \hline \text{Robinson at al. (2000)} \\ \end{array}$						
	Sanchez Gistau et al. (2012)						
	$\frac{1}{2} \sum_{i=1}^{2} \frac{1}{2} \sum_{i=1}^{2} \frac{1}$						
	Verdoux et al. (2013)						
	v crubux ct al., (2001)						

Appendix 6: NHS Ethical Approval



WoSRES West of Scotland Research Ethics Service

Professor Andrew Gumley Head of Mental Health & Wellbeing University of Glasgow Institute of Health & Wellbeing College of Medical, Veterinary and Life Sciences, University of Glasgow, Mental Health & Wellbeing Academic Centre, Gartnavel Royal Hospital, 1055 Great Western Road G120XH West of Scotland REC 4 West Ambulatory Care Hospital Dalnair Street Yorkhill Glasgow www.nhsggc.org.uk

Date 19 October 2016 Direct line 0141-232-1806 e-mail Wosrec4@ggc.scot.nhs.uk

Dear Professor Gumley

Study title:	Interpretative Phenomenological Analysis study of the
	relationship between suicidal behaviour and psychosis.
REC reference:	16/WS/0193
Protocol number:	Protocol Version 8
IRAS project ID:	203437

Thank you for your submission 19 October 2016. I can confirm the REC has received the documents listed below and that these comply with the approval conditions detailed in our letter dated 14 October 2016

Documents received

The documents received were as follows:

Document	Version	Date
Participant information sheet (PIS) [Participant Information Sheet]	Version 4	14 October 2016

Approved documents

The final list of approved documentation for the study is therefore as follows:

Document	Version	Date
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Client Information Letter Clinical Trials]		04 August 2016
GP/consultant information sheets or letters [V2 GP letter 12 08 2016]	2	12 August 2016
Interview schedules or topic guides for participants [V3 Semi structured interview guide 12 08 2016]		12 August 2016
Non-validated questionnaire [V1 Risk Screening Tool 02 09 2016]	1	02 September 2016
Participant consent form [V3 Consent Form 18 08 2016]	3	18 August 2016
Participant information sheet (PIS) [Participant Information Sheet]	4	14 October 2016

Document	Version	Date
REC Application Form [REC_Form_12092016]		12 September 2016
Research protocol or project proposal [V8 Final Major Research Project Proposal 22 Aug 2016 TC]	8	22 August 2016
Summary CV for Chief Investigator (CI) [V1 Andrew Gumley CV 08 01 2016]	1	08 January 2016
Summary CV for student [V1 Triona Collins CV 22 08 2016]	1	22 August 2016
Summary CV for supervisor (student research) [V1 Rory O Connor CV 02 06 2015]	1	02 June 2015

You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor's responsibility to ensure that the documentation is made available to R&D offices at all participating sites.

16/WS/0193 Please quote this number on all correspondence

Yours sincerely

M 1

Sophie Bagnall Assistant Coordinator

Copy to: Ms Emma Jane Gault Ms Elaine O'Neill, NHS Greater Glasgow and Clyde

Appendix 7: NHS R&D Approval



R&D Management Office West Glasgow ACH Dalnair Street Glasgow G3 8SW

20 October 2016

Ms Triona Collins Trainee Clinical Psychologist Gartnavel Royal 1055 Great Western Road Glasgow G12 0XH

Administrator: Mrs Elaine O'Neill Telephone Number: 0141 232 1815 E-Mail: elaine.o'neill2@ggc.scot.nhs.uk

Website: www.nhsggc.org.uk/r&d

NHS GG&C Board Approval

Dear Ms T Collins,

 Study Title:
 An Interpretative Phenomenological Analysis of the experience of trying to end one's life for people with psychosis

 Principal Investigator:
 Ms Triona Collins

 GG&C HB site
 Community Mental Health

 Sponsor
 NHS Greater Glasgow and Clyde

 R&D reference:
 GN16MH477

 REC reference:
 16/WS/0193

 Protocol no:
 V8.0; 22/08/16

I am pleased to confirm that Greater Glasgow & Clyde Health Board is now able to grant Approval for the above study.

Conditions of Approval

- 1. For Clinical Trials as defined by the Medicines for Human Use Clinical Trial Regulations, 2004
 - During the life span of the study GGHB requires the following information relating to this site

 Notification of any potential serious breaches.
 - ii. Notification of any regulatory inspections.

It is your responsibility to ensure that all staff involved in the study at this site have the appropriate GCP training according to the GGHB GCP policy (<u>www.nhsggc.org.uk/content/default.asp?page=s1411</u>), evidence of such training to be filed in the site file.

Page 1 of 2

Board Approval GN16MH477

- 2. For all studies the following information is required during their lifespan.
 - a. Recruitment Numbers on a monthly basis

 - b. Any change of staff named on the original SSI form
 c. Any amendments Substantial or Non Substantial
 d. Notification of Trial/study end including final recruitment figures

 - e. Final Report & Copies of Publications/Abstracts

Please add this approval to your study file as this letter may be subject to audit and monitoring.

Your personal information will be held on a secure national web-based NHS database.

I wish you every success with this research study

Yours sincerely,

Eoweil

Mrs Elaine O'Neill Senior Research Administrator

Page 2 of 2

Board Approval GN16MH477

Appendix 8: Participant Information Sheet





PARTICIPANT INFORMATION SHEET

A study of the relationship between suicidal behaviour and psychosis.

We would like to invite you to take part in a research study. To help you decide if you would like to take part, you need to understand what taking part would involve for you. Please take your time and read the following information carefully.

Who is conducting the research?

The research is being carried out by Ms Tríona Collins who is a Clinical Psychologist in training from the University of Glasgow. The research is being supervised by Professor Andrew Gumley and Professor Rory O'Connor from the University of Glasgow, and Dr Andrew McLean from the Esteem Service, Glasgow.

What is the purpose of the study?

The purpose of the study is to try to better understand the relationship between psychosis and suicidal behaviour. The study is being carried out as part of the requirements of the Doctorate in Clinical Psychology training course at the University of Glasgow. The study will involve talking to people who have attempted suicide in the past. All participants will be asked about the factors that may have led them to feeling suicidal, and how they view their experience since. It is hoped that the interviews will provide us with a better understanding of suicidal behaviour and how we can support people after a suicide attempt in future.

Why have I been invited?

We are inviting people who are currently receiving treatment in Esteem Services, and who have a history of a suicide attempt to take part in the study. We believe that you may fit these criteria and that is why we have invited you to take part.

What does taking part involve?

If you decide to take part in the study, you will be asked to:

- Let the clinician who told you about the study know that you are happy to learn more about the study and they will pass your details to Tríona Collins who will telephone you.
- Tríona will give you more information about the study, answer any questions you have and if you still would like to take part, she will arrange an appointment time with you. The appointments will all take place in Esteem Services in Glasgow.
- Before you begin the interview, Tríona will ask you to sign a consent form to say you agree to take part in the study
- Your interview will last around one hour and will be an informal discussion. Tríona will ask you some questions about what happened before and after your suicide attempt.

You can take a break at any time during the interview and you don't have to answer any questions that you don't want to.

If during the interview you tell the interviewer about wanting to hurt yourself or others imminently, and if this is of concern to Tríona, she will have a duty to report this. Your safety and the safety of others is of most importance. However, Tríona will try to discuss this with you first.

You will receive a contribution for your travel expenses to attend for the interview. The interviews will be audio recorded to make sure that what is written down in the study matches exactly what each participant says. Some quotes from your interview may be included in the research paper, but you will not be identified from any of the information

Finally, with your consent, we would like to write to your GP to tell them that you are taking part in this study and to give them a copy of this information sheet. A copy of this letter will be put in your clinical file in Esteem Services.

Do I have to take part?

No. Your decision to take part or not to take part is entirely up to you. If you agree to take part, you will be asked to sign a consent form before you start your interview, so that there is a record of your consent.

You are allowed to leave the study at any point without giving a reason. If you choose to leave the study, your data will be removed from the study, up to the point when the research is written up. The decision to leave will not affect the care or support you receive now, or in the future.

What happens to the information?

The audio recordings and any written information will be kept under password on a locked NHS computer and transferred to a secure Glasgow University network once the study has been completed. The data will be kept here for ten years, after which time the information will be destroyed. This information will be stored in accordance with the Data Protection Act, which means that we lock it securely and cannot reveal it to others without your prior permission.

Your name and any personal information will be known to the researchers but will be saved separately from your audio recording. Sometimes, representatives of the study sponsor, NHS Greater Glasgow and Clyde, may look at your personal information and records. This is to make sure that the researcher is conducting the study correctly.

The results of this study may be published in academic journals, conference proceedings and as a piece of work for a doctoral qualification in Clinical Psychology. Some direct quotes from your interview may be included in these reports/publications, however all information will be anonymised and it will not be possible to personally identify you from this information.

What are the possible benefits of taking part?

Your participation will help develop an understanding of suicidal behaviour among people with psychosis. It is hoped that you may find some benefit from having the chance to talk about your experiences.

At any point, if you feel distressed during or after the interview, we will ensure that you have information on how to access appropriate supports, if you need to.

Who has reviewed the study?

To make sure the study is being conducted correctly, it has been reviewed by the West of Scotland Research Ethics Committee and the NHS Greater Glasgow and Clyde Research & Development Department.

What if you have a complaint about any aspect of the study?

If you are unhappy about any aspect of the study and wish to make a complaint, please contact the researcher in the first instance but the normal NHS complaint procedure is also available to you.

If you have any further questions?

We will give you a copy of the information sheet and signed consent form to keep. If you would like more information, the researcher contact details are below:

Researcher(s) Contact Details:				
Dr Andrew Gumley Institute of Health & Wellbeing, University of Glasgow Administration Building, 1 st Floor Gartnavel Royal Hospital 1055 Great Western Road Glasgow G12 0XH Email: Andrew.gumley@glasgow.a c.uk Tel: 01412113939	Tríona Collins, Trainee Clinical Psychologist Institute of Mental Health & Wellbeing, University of Glasgow Administration Building, 1 st Floor Gartnavel Royal Hospital 1055 Great Western Road Glasgow G12 0XH Email: <u>t.collins.1@research.gla.a</u> <u>c.uk</u> <u>Tel:</u> 0141 211 0807	Professor Rory O'Connor Institute of Mental Health & Wellbeing Administration Building, 1 st Floor Gartnavel Royal Hospital 1055 Great Western Road Glasgow G12 0XH Email: <u>rory.oconnor@glasgow.a</u> <u>c.uk</u> Tel: 0141 211 3920		

If would like to speak to someone who is not closely involved in the study, then you can contact Dr Sue Turnbull. Her telephone number is: 0141 211 3900

Thank you for taking the time to read this information sheet.





Institute of Health & Wellbeing

Consent Form

Title of project: Interpretative Phenomenological Analysis study of the relationship between suicidal behaviour and psychosis. Name of researcher: Tríona Collins Patient identification number for this study:

Please initial the box

- 1. I confirm I have read and understood the information sheet V3 (19th August, 2016) for the above study.
- 2. I understand that my participation is voluntary and confidential and that I am free to leave the study at any time without giving any reason, without my current or future treatment being affected.
- 3. I understand that if I withdraw consent from the study, the information collected up to that point will be destroyed.
- 4. I give permission for the interview to be audio recorded.
- 5. I agree that you may inform my general practitioner, keyworker and psychiatrist of my involvement in the study.
- 6. I understand that if issues arise during the interview, the researcher will inform me of this and discuss the possibility of sharing this with my health care team.
- 7. I understand that my medical notes and data collected during the study may be looked at by individuals from the research team, regulatory authorities or from the study Sponsor where it is relevant to my taking part in this research. I give permission for these individuals to have access to this information.
- 8. I agree that fully anonymised quotations may be used in publications and other materials arising from the study.
- 9. I would like to receive a copy of the study results.

Subject Name	Date	Signature
Researcher	/ / Date	Signature
	/ /	

Thank you for agreeing to take part in this research

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2nd September, 2016. Version 2.





Thank you for taking part in the study entitled- Interpretative Phenomenological Analysis study of the relationship between suicidal behaviour and psychosis.

Here are some useful numbers to keep.

Organisation	Telephone number
Esteem South Service	0141 211 6563
Esteem North Service	0141 630 4940
Queen Elizabeth University Hospital Glasgow	0141 201 1100
NHS 24	111
The Samaritans	116 123
Breathing Space	0800 83 85 87

Appendix 11: Suicide Risk Screening Tool

SUICIDE RISK SCREENING PROTOCOL

RISK FACTORS FOR SUICIDE:

*Researcher to complete known sections in advance of the interview

- D Male gender (females more attempts, males more completions)
- **D** *Ethnicity* (*white attempt & complete more than others*)
- \Box Age ≥ 16 years?
- □ Current psychiatric disorder?
 - Current mood disorder (e.g. major depressive disorder, bipolar disorder)
 - **Current substance use disorder (e.g. alcohol, recreational or prescription drugs)**
 - Current psychotic disorder (e.g. bipolar disorder, schizophrenia)
 - **Current personality disorder (esp. borderline or anti-social personality disorder)**
- □ Suicide history?
 - **D** *Previous suicide attempt(s)* (Y/N)
 - □ *Family history of suicide attempts/completions (Y/N)*
 - **Current suicidal ideation (0-10 scale)**
 - **\Box** *Current plan (Y/N)*
 - Access to lethal means (e.g. firearm, medication)? (Y/N)
 - \Box *Current intent (On scale 0 10 [0 = no intent, 10 = strong intent], what is your current intent to kill yourself?* ____)
- □ Other risk factors?
 - □ Depressed mood (On scale 0 10 [0 = neg, 10 = pos] how would you rate your current mood? ____)
 - □ *Recent loss, separation/divorce/break-up?*
 - □ Impulsiveness?
 - □ *Hopelessness about the future?*
 - **Current distress, irritability, agitation or other atypical mental state?**

NOTES:

PROTECTIVE FACTORS AND SAFETY PLAN:

- □ In treatment? If so, is allocated clinician aware of risk? _____
- □ Family/roommate/friends aware of risk? _____
- D Presence of children in the home, spouse/partner, or other positive relationships?
- □ [IF YES TO ACCESS] Means restriction (firearms, drugs, family/social support/ monitoring)? _____
- □ Steps taken to increase participant safety (check all that apply):
- *LOW RISK* == *No past attempt or current suicidal ideation, plan or intent:*
 - □ Validated participant's feelings
 - □ Encourage participant to contact allocated clinician if distressed or in need of help in future
 - D Provide contact information for sources of support as required

MODERATE RISK == *Previous attempt(s), but intent* ≤ 6 *:*

- □ (Check all completed above)
- □ Participant supported to articulate own safety plan (i.e., what to do if thoughts/urges increase)
- Provide participant with emergency contact numbers (999, duty nurse at Esteem, Samaritans and Breathing Space)
- *HIGH RISK* == *Current SI present and intent* 7-8, *but no plan or access to lethal means:* \Box (*Check all completed above*)
 - Discuss with participant. Encourage them to contact support(s) and allocated clinician(s). If unwilling, researcher to directly contact allocated clinician or duty nurse at Esteem directly for advice/support.

IMMINENT RISK == *Current suicidal intent* 7-8 *with specific plan/access to means or* 9-10 *regardless of plan:*

- □ (*Check all completed above*)
- Discuss with participant. Researcher to directly contact allocated clinician or duty nurse at Esteem to refer participant immediately for further assessment/advice/support.
- Call and directly inform Dr Andrew McLean, Professor Rory O'Connor and Professor Andrew Gumley.

NOTES:

Assessor: _____

_____ Date: _____

Appendix 12: Sample of analysed script

Exploratory comments		Original transcript: Barry	Emerging	
~ 1			themes	
Code-	Code- Normal text: descriptive			
Underlined:	Italics: linguistic			
<u>conceptual</u>				
		[Suicidal risk tool implemented]		
		I am keen to hear about what experiences were you having that		
		actually led you to be seen by Esteem?		
Self-declaration-	Drug taking repetition, hesitancy	Ammm, so basically I was taking, taking a lot of drugs, ammm,	drug use	
urge to express-	Description of drugs taken Chealting for understanding	smoking a lot of weed and I was taking, I dunno if you have ever		
<u>containing self?</u>	Checking for understanding	heard a it, it's called mescaline, it's like LSD.		
		Okay.		
Difficulty accepting responsibility? Lack	"didn't know"- Stating nativity about drug use.	So basically I didn't know I, I wasn't aware I was taking it. So it was	Physical response to	
awareness?	Repetition Use of different words to describe	quite a shock to my system and then, basically I was, you know,	drugs	
<u>Cognitive</u> dissonance-	experience	tripping out, freaking out, thinking- what's going on. And then, just		
competing	Describing commanding auditory experiences	having really, seeing things, believing things, ammm, so obviously I		
perspectives?	ordering of events- voice first, then suicide attempt	wasn't prepared for it, so I thought it was, obviously my mind was	voices as	
commands but	Use of language- impaired mind, mind blank	impaired but I don't really know how how I got to that stage. Alot of	commanding	
emotional	coo of the famile of the on the state of the state	imparted out i don't learly know now, now i got to that stage. Anot of		
incongruent		it is blank for me. Okay. Ammm, but I remember prior to trying to		
response in		kill myself, so what it said was, the voices in my head they were		
<u>interview- apathy? /</u> detachment because	flow of options describing commanding voices	saying you can either kill some- you can kill you dad, you can kill		
it's too distressing?	and a companying rates	yourself, you can rape kids, or you can go- I live across from a		

1.1				
	ascribing		church, and it says you can go into the church and you can get ate.	
	experience because	First time- ordering events,	Like people will eat ya. So that was quite, that was like the first time	
	<u>of</u>		that I'd started to hear any voices or the psychosis had taken it's	
	psychosis?		affect.	
			Okay, okay, so you have said loads of stuff there, can I just pick up on	
			some of them? Yeah of course yeah.	
			So you were saying about the mescaline? mescaline.	
			And you said that you weren't aware that you were taking it?	
			Yeah.	
			Can you tell me a bit about that?	
	didn't think to	Repetition describing drugs	Basically it's legal, it's legal to buy it in America apparently and I, I	
	<u>check</u>	Describing surprise- "totally unaware"	was taking these health supplements which I was totally unaware of	Diug use- unaware
	ingredients?		the ingredients in it, so all the ingredients names were in Latin. And	
		Investigates ingredients	when I, when I looked up a lot of the ingredients I was like what are	
	<u>sequential</u>		these. It's only after I started to feel my body reacting to them in a	Physical response
	responsive to		really bad way so I was, I was really concerned, like oh, there must	triggered cessation
	physiological	Sequencing of events- describing response Emotional experience describes intentions	be something really bad in it. And when I checked the ingredients	
	<u>changes /</u>		"mescaline" I knew straight away what it was, I binned them. Right.	
	difficulty with volition? Lack		You know so I, I almost feel like where I bought them, I feel as if I	
	insight?		should be pursuing the company that sold them but at the same time I	Ambivalence about
	awareness		don't know if it's like a legal grey area.	olame?

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Appendix 13: Sample superordinate theme and subtheme examples

Andy:	Barry	Callum	Dave	Ed
SELF	SELF	SELF	SELF	ISOLATION FROM OTHERS
Underlying anxiety : started off with, like now looking back on it, like, anxiety, but because of things I didn't need to be anxious about like, like am, suspicions. I thought, in 6th year of school I thought a lot of people were trying to like bring me down	Underlying anxiety: , I've always been really concerned about my health but, well prior to, to this experience, I've always been concerned about my health Feeling ill "constantly": Not really	Feeling special: But, basically ammm, thought I was God. self as immortal: . I was just always just excited about the the kinda aftermath. Like, we all come into existence having not existed. You	Loss of sense of self: So I don't, I don't know want to just, I can't remember not being like that. And that's what I wanna be like. I don't wanna even fucking think a that, be like that at all. I can't remember just being normal not thinking hunners a mad shit and all that.	Feeling isolated : Well everybody was saying they didn't know what was going on so. Yup. Reliance on family/ social isolation : Ammm, just my family. That was really it.
Perceive interpersonal style as different : But I feel like right now, like my my issue is, I don't know if it is the medicines or if it is me as a person, that like I could like a relative could die, I could probably talk to you about it with relative ease. Like I, I don't think I'm a cold person but like, I suppose, I can be clinical in my outlook. [#ISo. Lthink I worry that other	I didn't know what was wrong with me. I just felt ill constantly. Self as vulnerable: Just watching what ever, what ever was recommended for me. Again you know what I mean, it's all recommendations. Again you know what I mean, it's all recommendations.	your aware and that's it. And then, 70 years later your, your dead again. And I just, I dunno. The unknown has always kinda fascinated me. And then I don't I don't really know why. I don't know why. I dunno why it's in my head.	Self as different: ? Don't know man. In between [haha]. Aye. And what's that like? I feel stressful, heavy. It's hard to keep shit going. Like just keeping a job normal and all that. Keeping relationships with people normal. It's just different. Self as dangerous . It was, it was	And a couple a pals but don't really talk to them anymore.
people don't see that the way I see it.	So, it's not really like I kinda found myself there, it's more like I kinda got led astray. And then once you get led	Self as saviour : ? I thought I was saving, I thought I was saving everyone. Right. I thought, amm	dangerous. That's what, that's how I didnae wanna be about. Cause it was a	

Health issue as reason for distress: ,	astray, you don't know where you are	it was like I was, I was pure. It	danger to other people. I know
something being wrong, that's making	gonna end up.	was, it was just like a haha, I don't	
you think that there's something wrong, if		know. It was just like the cycle of	Calf as nowarful? That was just what I
you know what I mean, like [#] so I know	Self as introverted : 2 I don't know	life I guess.	had in my head at the time. And it
there is some sort of health issue. But for	Just Tve always been quite		woulnes a made any difference. But if I
a long time I didn't think there was any	introverted so I always thought about	Salf as responding differently? I	would a got to them or anything. So I'm
issues, at all, I, I was, I thought everyone	the worst case scenarios in everything	dunno it's just like it's not something	iust glad L didnae
else was wrong and I was right	and nover really spoke shout much	would lough shout, but some I don't	Just grau i ulunac.
	kept everything to myself so. I think	really I don't know Asash I think	
Increasing succession: And thought he was	it's shringly been browing in me for a	mu wires a hit grossed in that kinde	Self as different So what, trying to just be
like personally trying to get me and like	long time. Well possibly I don't know	area of my head	fucking normal man.
had quite a lot of nightmares about him	long time. Wen possibly I don't know	area of my neau.	
and stuff Am and so			
and stuff. Ani, and so	Self as different. No, no I mean what	Self as suggestible: Yeah I think. I	self as wrong : Aye. Back then aye.
	my mind was thinking and what I	absorb a lot of people's habits and	Cause I didn't know really then, what
	could actually say was like it's almost	ammmm yeah. If someone's like	was, like I didn't have anything to say. I
	as if I had two different brains at the	drinking alot coming in at 4 in the	was wrong. In anything I was thinking.
	time. One for talking and one for	morning. I'm tempted to be with	Like I wasn't gonna just assume myself
	one for the thought process that was	them and you know. Aaaah. Kinda.	like that- aw man your fucking gone
	going on. So they were never really	Get involved in their friend circles	stupia.
	connected.	and stuff.	
			Self as hindrance Aye, I just thought he
			would be better without us.
	Self as Good versus self as bad: Cause		
	I thought, why, like I've been pretty		
	good all my life. Obviously I've done		Vulnerability - previous attacks I got, I
	drugs, or, you I know I've had fights		got slashed fucking, someone tried a stab

with people you know but I'm not	
condoning that, but that's, I'm a normal	
human being, I'm not a bad human	
being. So, to go through all that, it's	
like why now at this stage in my life	
am I getting this put on me? [#]. Does	
that make sense	
Cognitive dissonance- accepting and	
rejecting labels: What if someone says	
what's wrong with you- what would I	
say? yeah well I don't know like, I	
wouldn't really say much. Ammmm.	
Or even just to yourself, do you have	
any I would say I was more like	
schizophrenic, that like hearing voices,	
rather than like cause I think the	
psychosis is like passed. But then I	
don't know really know what the	
schizophrenia is. So, I think again I'm	
just labelling myself but I don't really	
want to label myself if anything I just	
have what I got and I know how to	
deal with it. Okay. So I wouldn't really	
put a label on it	

us a few times and then I got stabbed in the head and dragged outta my motor. And my motor got stole.['##] and then a few times some peoples tried a stab us but have missed. Like that. I've been done in a few times an all.

Underlying anxiety and suspicion of others I've always been uncomfy and all that see that way anxious and all that shite, paranoid a wee bit. Especially when I got done a few times. Means I got more paranoid. But I've always been anxious and that no really before I used to just go with the flow.

coping response Like when we all used to
fight and that when we were wee guys.
Like we always be the first running in at
every cunt and all that. I dunno. It's mad.
Okay and do you think that was in some
way? Made us feel as if I was sound
[haha]. So made you feel like you were
sound? Aye. Aye. Like cunts wouldnae

Feeling different: I don't know it just	notice if I done it	
made it seem a lot more, as if I was the		
only privileged one there cause my family was coming up every single day to see me. So again, that made me, ,that made me feel a bit like an outsider, the fact that my family would come up and see me and make sure I was doing alright and bring me stuff.	Desire to be viewed as fearless? The awkward way when I fucking don't talk man or sit pure fucking. Cause I cause I sit like that. See if there's people I'm no scared, I dunno how I do it, I'm not scared a people and that	
Whereas no one, no one else's family seemed to do that. [#] maybe if everyone's family done it then it would just a seemed more like a loving environment, you know what I mean instead of people. I don't know. People not really getting the attention that they need. Or help	Desire to be viewed as fearless And then I act out to show I'm not, I'm not scared. I'm no scared, I'm just fucking, can't, don't [haha] know how to act,	

Appendix 14: Clustering subthemes to generate superordinate themes

		Participant 1 Andy	Participant 2 Barry	Participant 3 Callum	Participant 5 Dave	Participant 6 Ed
psychosis exposed self evaluation	I can't remember just being normal	SELF- CRITICISM	SELF CRITICISM		SELF CRITICISM	
		CONFLICT	AVOIDANCE	ISOLATION	LOSS	ISOLATION
		SELF	SELF	SELF	SELF	
	distance from others	MOOD	BLAME	RELATIONSHIPS	SOCIAL FUNCTIONING	
		HELP SEEKING			TRANSITION	
		MEDICATION			INSIGHT/ LACK	
psychosis triggered suicide attemp	t out of control		DRUG USE	DRUG USE	DRUG USE	DRUG USE
		LACK OF CONTROL	INCREASING SUSPISCION	OUT OF CONTROL AND CONNECTIONS	CONTROL	TRIGGERING EVENTS
					SUSPICION	
			NOT FEELING BELIEVED		NOT FEELING BELIEVED	INVALIDATED
			PRECIPITANTS	MOOD		
			SEEKING SOLUTIONS		DEATH	
			REJECTING OTHERS			
	I follow the command	VOICES	VOICES	HALLUCINATIONS	PSYCHOSIS	VOICES
		"SURREAL"	"Crazy"	"SURREAL"	"mad"	IMPACT OF NOVEL EXPERIENCES
	this has to end right now	ATTEMPT	SUICIDE ATTEMPT	DEATH		SUICIDE AS ESCAPE
		PSYCHOSIS	INNER AND OUTER CONFUSION	METAPHOR	Additional experiences	
		DECISION MAKING		FEELING TRAPPED		
		"everything was getting worse"	DESPAIR	CONFUSION	EXPERIENCES AS CONSTANT	DISTRESS AS CONSTANT
increased awareness	be aware of like, your inner workings	THINKING ABOUT THINKING	THINKING ABOUT THINKING	ADJUSTMENT	THINKING ABOUT THINKING/ DISTRESS	HELP SEEKING
		INSIGHT	METAPHORS		-	
		COPING		THOUGHTS		
			EMPATHY AND TIME	SOCIAL SUPPORT	COPING	FUNCTIONING
		VALUE FRIENDSHIPS				
		IMPACT OF ATTEMPT	LOSS	IMPACT OF ATTEMPTS/ PSYCHOSIS	ATTEMPT	ATTEMPT AND ADMISSION
			DISTRUST HEALTH SERVICES	SENSE MAKING		MEDICATION
			PARTICIPATION			FAMILY RELATIONS
		TABOO		STIGMA		

Appendix 15: Sample of memo writing

Memo 5

Managing uncertainty in my ability to uncover understanding- awareness of distress of those I interviewed, mainly interpreted through their physical agitation, fidgeting, unease as time wore on in the interviews.

[Barry's] voices were telling him to do unbearable things. He denied being distressed in the interview when talking about this. But he seemed to be physically agitated. Part of me wondered if this was what made these young men vulnerable in the first place- a disconnection in their abilities to cue up what their bodies were telling them, and being able to respond appropriately to this. I am also aware that that my position of trainee clinical psychologist, but in this context- as a researcher might trigger some unease, there will be a power imbalance as I am asking the questions. This might be impacting on their behavioural responses/ sense making? Trying best to minimise this by offering breaks but participants all signalled their keenness to talk and "help".

Appendix 16: Research Proposal

Cover page

Name of assessment	Major Research Proposal
Title	Interpretative Phenomenological Analysis study of
	the relationship between suicidal behaviour and
	psychosis.
Matriculation number	2166405c
Date of submission	22.08.2016
Version number	8
Word count	3461 (excluding appendices)

Background

A disproportionate number of people with psychosis end their own lives in comparison to those in the general population (Nordentoft, Larsen, Bertelsen & Thorup, 2008). One of the risky times for this group is during their first episode of psychosis. With no qualitative studies to inform our understanding, little is known about why this occurs, and for those who survive suicide attempts, it is not known what kept them safe.

Aims

This seminal study aims to explore the experience of attempting to end your life for people with psychosis. It will ask people what was their experience at the time, what kept them safe and what helped them to recover.

Methods

This qualitative study will recruit 6- 10 participants. Their interviews will be analysed using Interpretative Phenomenological Analysis.

Applications

It is hoped that this study will be the first to engage in a dialogue to aid our understanding of the experience of people with psychosis of attempting to end their life.

(Word count 162)

1. Introduction

1.1 Rates of suicide for people with psychosis

It has been reported that 6% of those with schizophrenia take their own lives through suicide (Palmer, Pankratz & Botswick, 2005), with up to 32% of adolescents in first episode psychosis attempting suicide (Birchwood et al., 2000). A recent systematic review estimated the lifetime rate of suicide for those with schizophrenia at 5% (Hor & Taylor, 2010). These figures are stark, and when non-fatal suicidal behaviour is considered, the risk of morbidity increases. Research has found that between 5% (Melle et al., 2006) and 28% of people with psychosis have attempted suicide (Bertelsen et al., 2007).

1.2 Research on suicidal ideation and behaviour, and psychosis

To date, there has been much quantitative research in the area of suicide, focusing mainly on prevalence, risk/protective factors, and intervention/ prevention. A systematic review carried out in 2015 showed that suicidality and self- harm are prevalent in those who are deemed to be in the "ultra high risk", or prodromal stage of psychosis (Taylor, Hutton & Wood, 2015). Research has shown that a high proportion of those with first episode psychosis experience depression (Addington, Addington & Patten, 1998). In one study, 80% of participants were reported to have experienced moderate depression over an 18 month period (Upthegrove et al., 2009). Depression and hopelessness have been established as some of the precursors to suicidal behaviour in psychosis (Nordentoft et al., 2002). For those with psychosis who develop depression, they appraised greater humiliation, loss, and entrapment from their psychosis than those who did not develop depression (Birchwood, Iqbal & Upthegrove, 2005). A study carried out in 2012 by Dutta and colleagues, looked at mortality of people with first contact psychosis in the London, Nottingham, and Dumfries and Galloway across various periods ranging from 1965-2004. This study showed that there was a high mortality rate for people with first- contact psychosis. It has been recognised that a lack of understanding remains about the course of suicidality in the early phase of psychosis (Upthegrove, Birchwood, Ross, Brunett, McCollum, & Jones, 2009).

More recently, the role of attachment in recovery from psychosis has been investigated. Attachment security has been linked with recovery from negative symptoms of psychosis (Gumley et al., 2014). However, little is known about how attachment to significant others unfolds in the context of a suicidal experience. In what way, for example, do relationships with others impact on the person's narrative about their attempt to end their life? Recent literature surrounding the recovery process in mental health is encompassed in the research which looked at personal recovery. Known as "CHIME", this covers the processes of connectedness, hope and optimism for the future, identity, meaning in life, and empowerment (Leamy, Bird, Le Boutillier, Williams, & Slade, 2011).

In 2010 it was noted that it useful to follow up quantitative studies with qualitative research, in the field of suicide (Hjelmeland & Knizek, 2010). Qualitative studies in suicide are important as they move away from an "explanations" driven means of research, and thinks critically about how we can inform our understanding of suicidality using qualitative methods (Hjelmeland & Knizek, 2010). One systematic review critiqued qualitative studies of the subjective experience of people who were suicidal, irrespective of psychiatric diagnosis (Lakeman & Fitzgerald, 2008). This review identified 12 studies, which focused on various aspects of suicidality such as how people recovered from a suicide attempt. Although these studies covered a range of age groups and research sites, there were none specific to people with psychosis. Research suggests that the voice of those with psychosis is too often left out, reflected in the paucity of qualitative research into the experiences of people with psychosis (Geekie, 2004).

1.3 Positioning the study

Interpretative Phenomenological Analysis (IPA) is a qualitative approach to research which aims to explore the meaning participants attach to their personal and social worlds, with an emphasis on the meaning of particular experiences in participants' lives (Smith & Osborn, 2008). The researcher is permitted to become an active agent in the lived experience of the lives of the participants, through the reflective and subjective process involved in interpretation (Reid, Flowers & Larkin, 2005).

This seminal study will be the first to explore the suicidal experiences for people with psychosis, and hopes to inform the literature base about this otherwise previously unknown topic.

1.4 Aims

This study will interview people with first episode psychosis about their experience of a suicide attempt.

A semi structured interview guide will be designed to explore topics such as what triggered the attempt, the impact of any meaningful relationships on the experience and the person's experience of recovery.

2.0 Plan of investigation

2.1 Design

This study was conceived as an IPA study. Ethical approval will be obtained from the NHS. Data will be gathered through the application of semi- structured interviews and subsequently analysed using IPA.

2.2 Consultation

Two periods of consultation will shape the design of this study.

1. Consultation with professionals within the Esteem Service.

Potential participants will be recruited from the Esteem Service, which is for individuals with first – episode psychosis. A series of consultations will occur with multi-disciplinary staff in the Esteem Service to inform the recruitment and interview process.

2.3 Consultation with experts by experience.

Service users are acknowledged as experts, and may have valuable knowledge that can be shared into the health difficulties they experience. The suitability of the interview guide will be discussed with a group of experts by experience.

2.4 Interview Guide

The semi-structured interview guide will include questions about the suicidal experience, how psychosis impacted on the experience, and how they recovered from the experience. The guide will be shaped further through meetings with academic and field supervisors. This topic guide will be shared during the consultation process as described above.

2.5 Measures

A semi-structured interview guide will be devised to address the main research aims and according to IPA guidelines (Smith, Flowers & Larkin, 2009). The suitability of this guide will be discussed with the research, field supervisor, consultation with Esteem clinicians and experts by experience. The schedule will be discussed with Dr Adele Dickson, a leading expert in IPA.

A pilot interview will be conducted in order to ensure the semi-structured interview is fit for purpose and to safeguard against any potential areas of risk. Assuming the interview progresses as planned, this interview will be included in the final analysis. The interview schedule will be used as a guiding tool as opposed to being systematically and rigidly adhered too, to reflect sensitivity to context (Yardley, 2000). Interviews will be approximately one hour in duration.

2.6 Participants

It is proposed that participants will be registered with the Esteem Service in Glasgow. Esteem is a multidisciplinary service for adults aged 16- 35 years old with first episode psychosis. The study will include adults aged 18 years and over. Socio-demographic information will be gathered such as age of participant, diagnosis, occupation and postcode, in order to determine the socio- economic status of the area in which participants reside using SIMD data.

2.7 Inclusion and Exclusion Criteria

The study aims to include any adult aged 16 years and over who are currently in receipt of treatment for psychosis and who has attempted suicide. For the present purposes, 'suicide attempt' is defined as a non-fatal, self-directed self-harming episode associated with evidence of suicidal intent (O'Connor et al. 2013). This will be ascertained by multi-disciplinary professionals within the service.

To safeguard against risk, there will be some exclusion criteria.

- 1. Participants who have attempted suicide within three months or are at imminent risk of harming themselves. A risk assessment will be conducted before and after the study to further determine risk (Appendix 1).
- 2. Those who are acutely psychotic will be excluded from the research.
- 3. Those who are deemed not to have the capacity to consent will be excluded.
- 4. Those who are not competent in understanding the questions in English will be excluded.

2.8 Recruitment Procedures

It is proposed that recruitment will take place in Esteem Services in Glasgow. The recruitment process will be considered in consultation with the multidisciplinary team in

Esteem. It is proposed that during the team's weekly case review, clinicians will be asked to consider who on the caseload would fit the criteria and be eligible for inclusion in the research.

Potential participants will be those who meet the inclusion criteria, and in that way they will represent a homogenous and purposive sample as set out by Smith, Flowers & Larkin, 2009. As participants for IPA studies are purposively selected, frequently participants are referred to studies by those who are familiar with the studies aims (p 49, Smith, Flower & Larkin, 2009).

Once identified, and agreed upon by the team and the individual's consultant, their name will be given to the key worker who will make initial contact. Each keyworker will be provided with a script to include details of the study, and highlighting that participation is voluntary. The key worker will provide an information sheet to potential participants. The information sheet will include contact details of an independent person who can be contacted for details of the study.

If the person signals their interest to participate to the key worker, the key worker will inform the researcher who will make contact with the person by phone. The researcher will arrange an interview time with the potential participant. It is envisioned that the researcher will be a member of clinical staff at the time of recruitment. The researcher will have no responsibility for clinical care of potential participants.

Potential participants will be asked if they understand what is involved in the study. If they agree, written consent will be obtained at this time. Participants will be given information on how to contact the researcher and will be reminded of the voluntary nature of the study. The potential participants will be advised that all quotations will be anonymised and participant socio-demographic information may be altered if required, to ensure anonymity, given the small sample size required for this study.

2.9 Data Analysis

Data will be transcribed verbatim by the researcher. The data will be analysed using Interpretative Phenomenological Analysis. Guidelines for analysis as described by Smith, Flowers and Larkin (pp. 79- 108, 2009) will be adhered to. Dr Adele Dickson, an expert in IPA will also be consulted as part of this process. Regular supervision meetings will be maintained with the research supervisors who have experience with IPA. In addition, an online interactive discussion group for IPA researchers (http://groups.yahoo.com/group/ipanalysis/) and a blog developed by Michael Larkin will be used to guide the analysis (http://ipacomminterpretation.tumblr.com/).

Consistent with Smith et al. (2009), the analysis will take place in a number of stages:

- 1. Initial transcription.
- 2. The participant is placed at the core of the analysis by immersion via listening to the audio and re-reading of the transcript.
- 3. Initial note-taking, focusing on the descriptive linguistic and conceptual comments.
- 4. Emergent themes are developed into discrete chunks.
- 5. Themes are clustered and superordinate themes are developed.
- 6. The process is repeated for the next transcript while maintaining a willingness to engage with any new themes. Memo writing is employed.
- 7. Patterns are sought across interviews. Master themes are generated to link associated superordinate themes to support goodness of fit.

2.10 Justification of sample size

A sample size of 6-10 participants will be sought. IPA recognises that a sample size is contextual, and that there is a commitment to idiography. By focusing on a small sample size, one sets out to analyse the data at a greater depth (Hefferon & Gils- Rodriguez, 2011). This sample size fulfils the requirements for IPA research to ensure rich analysis (Smith, Flowers & Larkin, 2009).

2.11 Settings and Equipment

The interviews will be conducted in the Esteem Service in which the participant is currently registered. Each interview will be conducted in a quiet room with the researcher and participant. All interviews will be audio recorded (Appendix 2).

Once recorded, interviews will be transferred to encrypted laptops and transcribed by the researcher. All identifiable information will be removed and participants will be assigned random pseudonyms. All recordings will be handled in accordance with University and NHS guidelines. The data will be stored and backed up monthly on the University of Glasgow secure network (servers) for the duration of the study. Once the Doctoral Thesis project has been submitted, the data will be transferred to Enlighten for storage as per University guidelines.

3.0 Health and Safety Issues

3.1 Researcher Safety Issues

All interviews will be conducted during working hours in the Esteem Service within which the participant is registered (Appendix 3). The interviews will only be conducted while other staff members are on site. Regular supervision meetings will be arranged with the research supervisors to coincide with interviews.

3.2 Participant Safety Issues

During the consultation process with Esteem staff, the opportunity to discuss participant safety issues will be given. All participants will receive information about the study prior to opting in. Each participant will sign a consent form and be able to opt out of the study at any point.

The management of potential participant distress during the interview was considered. Participants will be reminded that they are under no duress to answer questions and may take a break at any point. In the event that further support is required, participants will be provided information with Crisis team information. If the participant is deemed to be in immediate risk as determined by the risk assessment tool (Appendix 1), they will be informed that confidentiality will be waived and their information will be provided to the Duty worker.

The researcher will inform the research supervisors in the case of any suspected elevation in risk for participants, as supported by the risk assessment form (Appendix 1). Regardless of whether interviews are completed, participants will be given a leaving form which will include information about additional support and local crisis team numbers. Local protocols around crisis team support will apply for participants.

4.0 Ethical Issues (including where submissions will be made)

Ethical issues to be considered include the risk of distress that may be caused for participants by taking part in the study. These issues will be considered by the research team, which includes experts in managing distress in this population. Every effort will be made to ensure the participants understand what is expected of them and what the study will entail. This will be achieved through the dissemination of an information sheet prior to consent. Participants will be reminded of the voluntary nature of their participation, and their right to withdraw at any point. If participants become unduly distressed, determined by the risk assessment tool or clinical judgment, the interview will be ended and the person's distress will be managed in line with local crisis team protocols if required.

Ethical approval will be sought from both the NHS research committee. At all times, the research will be conducted in accordance with local and national policies and procedures for conducting research and managing patient data.

Participants will receive a maximum of £5 to cover the cost of travelling to the interview. The costs associated with the study will be met by funding from the Doctorate in Clinical Psychology in the Institute of Health and Wellbeing at the University of Glasgow. Participants will be sent a summary of the findings if they indicate they would like to do so. The final study will be written up to fulfil the requirements of the Doctorate in Clinical Psychology. The research may be presented at conferences and written up for publication in scientific journals.

5.0 Timetable

The timetable proposed by the University of Glasgow for submission is as follows: 7th December 2015: Draft of the proposal to be submitted to academic supervisors. 1st February 2016: Proposal submission to the university. 16th May 2016: Final approval of MRP proposal and associated paperwork. August 2016: Ethical applications to be made. November 2016: Interviews to commence. April 2017: Interviews to be concluded.

6.0 Practical Applications

It is hoped that this study will begin the dialogue in understanding the experience of a suicide attempt for people with psychosis. Having traditionally been informed using quantitative methods, this study can give insight into the lived experience for people with psychosis following a suicide attempt.

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